State of Ohio Environmental Protection Agency

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

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

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

08/23/04

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

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

Dear Bill Rupert:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Toledo Div of Environmental Services.

Sincerely,

Michael W. Ahern

Michael W. Ahern
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: Toledo Div of Environmental Services
File, DAPC PMU

State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: **08/23/04**	Effective Date: **10/13/04**	Expiration Date: **10/13/07**

This document constitutes issuance of a Title V permit for Facility ID: 04-48-02-0007 to:
BP Products North America Inc
4001 Cedar Point Road
P.O. Box 696
Oregon, OH 43697

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

B001 (Hydrogen Furnace)
PR-562980
Process Heater

B003 (ADHT Stripper Reboiler)
PR-562974
Process Heater

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

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

B006 (Reformer 2 Furnace)
PR-562987
Process Heater

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

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

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

B014 (Reformer 1 Furnace)
PR-562962
Process Heater

B015 (Crude 1 Furnace)
PR-562954
Process Heater

B016 (Coker I Heater)
PR-562940
Process Heater

B017 (Coker II Heater)
PR-562941
Process Heater

B018 (FCC Preheater)
PR-562955
Process Heater

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

B020 (Power Boiler)
PR-562967
Process Heater

B022 (Naphtha Treater Heater)
PR-562958
Process Heater

B029 (ADHT Furnace)
PR-560002
Process Heater for A-train diesel hydrotreater.

B030 (BGOT Furnace)
PR-560001
Process Heater for B-train gas oil hydrotreater.

B031 (Vac 1 Furnace)
PR-560003
Process Heater

B032 (Coker 3 Furnace)
PR-560004
Process Heater

F001 (Plant Roadways)
Plant Roadways

F004 (Coke Crushing)
Coke crushing

F005 (Coke Handling)
Wet coke transfer from coke pit

F006 (Coke Crushing)
PR-680246
Coke crushing

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

J004 (Marine Loading)
Marine dock for loading and unloading petroleum products into/from ships/barges. This also includes fugitives for the marine dock loading process.

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

J006 (Special Fuels Loading Rack)
Special Fuels Loading Rack

P007 (FCC & CO Boiler)
Fluidized catalytic cracking. The fugitive emissions from the CO Boiler and the FCCU are included with this emissions unit.

P009 (Sulfur Recovery Unit)
Sulfur Recovery Unit. Thhis unit also includes the fugitive emissions from the sulfur recovery unit.

P010 (Crude/Vac 2)
Fractionation of crude oil. The fugitive emissions from the Crude 2 unit are included with this source.

P011 (Crude/Vac 1)
Fractionation of crude oil. The fugitive emissions from the Crude 1 and Vac 1 units are included with this source.

P013 (Biological Sludge Belt Filter Press)
Waste biological sludge Belt Filter Press (backup oily sludge)

P014 (Oily Belt Filter Press)
Oily Belt Filter Press (biological sludge backup)

P017 (Coker 2)
Delayed coking and coke cutting

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

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

P021 (Alky 1)
Produces high quality alkylate.

P022 (Alky 2)
Produces high octane gasoline.

P023 (Alky 3)
Produces high octane gasoline.

P025 (Refinery WWT System)
Process oily water system and storm water system (including drains, manholes, junction boxes, lift stations, laterals, and trunklines) within the refinery and refinery wastewater treatment system (excluding P013&P014) with the following treatment and control systems: carbon canisters and benzene stripper vented to the West Flare.

P028 ("A" Train Diesel Hydrotreater)
Hydrotreating.

P029 ("B" Train Gas Oil Hydrotreater)
Hydrotreating.

P036 (Coker 3)
Delayed coking and coke cutting.

P037 (Sulfur Recovery Unit #2 and #3)
Sulfur recovery unit #2 and #3. The fugitive emissions from SRUs #2 and #3 are also included with this emissions unit.

P041 (Isocracker 2)
Cracking of heavy feed stocks.

P042 (Hydrogen Plant)
Hydrogen Plant

P043 (Cat Poly Plant (PR-6920, 6921, 6923))
Poly Plant. This unit includes fugitives from the Cat Poly Plant.

P044 (Diesel Engine #1)
Diesel Engine used to pump water

P045 (Diesel Engine #2)
Diesel Engine used to pump water

P048 (Knock Motors)
Knock Motors - 6 gasoline and 1 aviation (jet fuel) gasoline

P053 (Diesel Engine #3)
Diesel Engine used to pump water

P054 (Diesel Engine #4)
Diesel Engine used to pump water

P055 (Cooling Tower 1)
Non-contact Cooling Tower

P056 (Cooling Tower 3)
Non-contact Cooling Tower

P057 (Cooling Tower 4)
Non-contact Cooling Tower

P058 (DHT Cooling Tower)
Cooling of recirculated refinery water.

P059 (Sat Gas Plant (Fug))
Sat Gas Plant Fugitives. There is no point source for the Sat Gas Plant.

P060 (Unsat Gas Plant (Fug))
Unsat Gas Plant Fugitives. There is no point source for the Unsat Gas Plant.

P802 (Scaltech Unit)
Scaltech unit

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

T011 (IFR, PR-500153)
Storage of Petroleum Liquids

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

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

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

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

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

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

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

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

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

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

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

T025 (EFR, PR-500811)
Storage of Petroleum Liquids. This tank includes all of the fugitives from the East Tank farm.

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

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

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

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

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

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

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

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

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

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

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

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

T038 (EFR, PR-500120)
Storage of Petroleum Liquids. This tank includes all of the fugitives from the West tank farm.

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

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

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

T042 (Spheroid/Vapor Control, PR-662)
Storage of Petroleum Liquids

T043 (Spheroid/Vapor Control, PR-663)
Storage of Petroleum Liquids

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

T086 (FR, PR-500140)

Storage of Petroleum Liquids

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

T117 (Propylene Cavern)
Storage of Petroleum Liquids. This source also includes all of the fugitives from the LPG unit area.

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

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

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

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

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

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

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

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

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

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

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

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

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

T178 (IFR, PR-500258)
Storage of Petroleum Liquids

T179 (FR, PR-500162)
Storage of Petroleum Liquids. This tank includes all of the fugitives from the gasoline blending area.

T180 (FR, PR-500253)
Storage of Petroleum Liquids

T181 (FR, PR-500254)
Storage of Petroleum Liquids

T182 (FR, PR-500275)
Storage of Petroleum Liquids

T183 (FR, PR-500599)
Storage of Petroleum Liquids

T184 (FR, PR-500735)
Storage of Petroleum Liquids

T185 (FR, PR-500736)
Storage of Petroleum Liquids

T186 (IFR, PR-500237)
Tank 237 - R & D Gas Linewash storage tank.

T187 (EFR, PR-500818)
Storage of Petroleum Liquids. This tank includes all of the fugitives from the North tank farm.

T188 (EFR, PR-500819)
Storage of Petroleum Liquids

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

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, 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

Nitrogen Oxides (NOx) Budget Trading Program

[The following emissions units contained in this permit are subject to OAC Chapter 3745-14: B004 and B020]

1. OAC Chapter 3745-14

   a. Facility Code - 0448020007

   b. The following regulated emissions units are subject to the applicable requirements specified in OAC Chapter 3745-14 and the annual NOx allowance allocations listed below:

Emissions Unit	Annual Allowance for Calendar Years 2004 through 2007
B004 - Riley Boiler	39
B020 - Power Boiler	101

   [OAC rule 3745-14-01(C)(1)]

   c. The emissions units identified in Section 1.b above are NOx budget units under OAC rule 3745-14-01(C)(1)(b).

   [OAC rule 3745-14-05(C)(4)]

   d. NOx allowances for units commencing operation on the dates specified in OAC rule 3745-14-05(C)(4) shall be allocated from the new source set-aside in accordance with the provisions of OAC rule 3745-14-05(C)(4)(d).

   [OAC rules 3745-14-01(E)(1)(a)(i), 3745-14-01(E)(1)(a)(ii), and 3745-14-03(B)(1)]

   e. The NOx authorized account representative shall submit a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of OAC rule 3745-14-03. The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit.

   [OAC rules 3745-14-01(E)(3)(a) and 3745-14-01(E)(3)(c)]

   f. Beginning May 31, 2004, the owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with OAC rule 3745-14-08, plus any amount necessary to account for actual utilization under paragraph (C)(5) of OAC rule 3745-14-05 for the control period.

   [OAC rule 3745-14-01(E)(3)(d)]

g. NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09.

[OAC rule 3745-14-01(E)(3)(e)]

h. A NOx allowance shall not be deducted, in order to comply with the requirement under paragraph (E)(3)(a) of OAC rule 3745-14-01, for a control period in a year prior to the year for which the NOx allowance was allocated.

[OAC rules 3745-14-01(E)(3)(b), 3745-14-01(E)(4)(a) and 745-14-01(E)(4)(b)]

i. Each ton of NOx emitted in excess of the NOx budget emission limitation, as defined in OAC rule 3745-14-01(B)(2)(yy), shall constitute a separate violation of OAC Chapter 3745-14, the Clean Air Act, and applicable Ohio law. The owners and operators of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under paragraph (E)(4)(a) of OAC rule 3745-14-06 and pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of OAC rule 3745-14-06.

[OAC rule 3745-14-01(E)(3)(h)]

j. When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review.

[OAC rules 3745-14-03(D)(2) and 3745-14-03(E)(1)]

k. Except as provided below, the Director shall revise the NOx budget permit, as necessary, in accordance with OAC rule 3745-77-08. Each NOx budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01 and, when recorded by the Administrator, in accordance with OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx budget units covered by the permit or the overdraft account of the NOx budget source covered by the permit.

[OAC rule 3745-14-08(A)(5)]

l. The owner or operator of a NOx budget unit shall comply with the prohibitions under OAC rule 3745-14-08(A)(5).

m. The owners and operators of the NOx budget unit shall keep on site at the source each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)

[OAC rule 3745-14-01(E)(5)(a)(i) through (iv)]

i. the account certificate of representation for the NOx authorized account representative for the NOx budget unit and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of OAC rule 3745-14-02, provided that the certificate and documents shall be retained on site at the

source beyond such five-year period until such documents are superseded because of the submission of a new account certificate or representation changing the NOx authorized account representative;

ii. all emission monitoring information, in accordance with OAC rule 3745-14-08;

iii. copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program; and

iv. copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.

[OAC rule 3745-14-08(A)]

n. The permittee, and to the extent applicable, the NOx authorized account representative of the NOx budget unit, shall comply with the monitoring and reporting requirements as provided in OAC rule 3745-14-08 and in 40 CFR Part 75, Subpart H. For purposes of complying with such requirements the definitions in OAC rule 3745-14-01(B) and in 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR Part 75 shall be replaced by the terms "NOx budget unit," "NOx authorized account representative," and "continuous emission monitoring system" (or "CEMS"), respectively, as defined in OAC rule 3745-14-01(B).

[OAC rules 3745-14-01(E)(2)(a), 3745-14-01(E)(5)(a)(ii), 745-14-08(A)(2)(a) through (A)(2)(d), 3745-14-08(B)(1), and 3745-14-08(C)(1)]

o. The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from these emissions units in units of the applicable standards. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. Each continuous 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. This includes all systems required to monitor the NOx emission rate, NOx concentration, heat input rate, and stack flow rate, in accordance with 40 CFR Parts 75.71 and 75.72. The permittee shall comply with the initial and re-certification procedures of 40 CFR Part 75. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request. The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in lb/mmBtu actual heat input on an hourly average basis, emissions of nitrogen oxides in lbs/hr, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. Whenever the monitoring system fails to meet the quality assurance or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

[OAC rule 3745-14-08(E)(2)(b)]

p. The permittee shall comply with the monitoring plan requirements of 40 CFR Part 75.62, except that the monitoring plan is only required to include information required by 40 CFR Part 75, Subpart H.

[OAC rule 3745-14-01(E)(4)(b)]

q. The NOx authorized account representative of the NOx budget unit shall submit the reports and compliance certifications required under the NOx budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.

[OAC rules 3745-14-02(A)(5) and 3745-14-08(E)(1)(b)]

r. Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

If the NOx authorized account representative for a NOx budget unit subject to an acid rain emission limitation who signed and certified any submission that is made under Subpart F or G of 40 CFR Part 75 and which includes data and information required under OAC rule 3745-14-08 or Subpart H of 40 CFR Part 75 is not the same person as the designated representative or the alternate designated representative for the unit under 40 CFR Part 72, then the submission shall also be signed by the designated representative or the alternate designated representative.

[OAC rules 3745-14-08(E)(4)(b) and 3745-14-08(E)(4)(c)(i)]

s. The NOx authorized account representative shall submit quarterly reports covering the period May 1 through September 30 of each year and including the data described in 40 CFR 75.74(c)(6). The NOx authorized account representative shall submit such quarterly reports, beginning with the calendar quarter covering May 1 through June 30, 2003. The NOx authorized account representative shall submit each quarterly report to the Administrator within thirty days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR Part 75, Subpart H.

[OAC rule 3745-14-08(E)(4)(d)(i) and (ii)]

t. The NOx authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:

i. the monitoring data submitted were recorded in accordance with the applicable requirements of OAC rule 3745-14-08 and 40 CFR Part 75, including the quality assurance procedures and specifications; and

ii. for a unit with add-on NOx emission controls and for all hours where data are substituted in accordance with 40 CFR Part 75.34(a)(1), the add-on emission control were operating

within the range of parameters listed in the quality assurance program under Appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate the NOx emissions.

[OAC rules 3745-14-08(D) and 3745-14-08(E)(3)]

u. The NOx authorized account representative for a NOx budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director and the Administrator in accordance with 40 CFR Part 75.61. The NOx authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or re-certification tests required under paragraph (B) of OAC rule 3745-14-08, including the information required under Subpart H of 40 CFR Part 75.

[OAC rules 3745-14-04(A)(1) and 3745-14-04(A)(2)]

v. For each control period in which one or more NOx budget units at a source are subject to the NOx budget emission limitation, the NOx authorized account representative of the source shall submit to the Director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units. The NOx authorized account representative shall include the following elements in the compliance certification report, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NOx budget emission limitation for the control period covered by the report:

i. identification of each NOx budget unit;

ii. at the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under paragraph (E) of OAC rule 3745-14-06 for the control period;

iii. at the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with OAC rule 3745-14-08, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of OAC rule 3745-14-06; and

iv. the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.

[OAC rule 3745-14-04(A)(3)]

w. In the compliance certification report under Section 1.v.iv above, the NOx authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx budget trading program applicable to the unit, including all the following:

i. whether the unit was operated in compliance with the NOx budget emission limitation;

ii. ether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with OAC rule 3745-14-08;

iii. whether all the NOx emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report submissions have been made; and

iv. whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed. If a change is required to be reported under Section 1.v.iv above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

[OAC rule 3745-14-03(B)(3)(a)]

x. The NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.

[OAC rule 3745-14-01(E)(2)(b)]

y. The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance by the unit with the NOx budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.

2. [OAC rules 3745-14-08(A)(2)(c) and 3745-14-08(A)(2)(d)]
The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on-site and available for inspection during regular office hours.

3. **3745-21-07 Control of Emissions of Organic Materials from Stationary Sources**
(J) Waste gas disposal:
(2) No person shall emit organic materials into the atmosphere from a waste gas flare system unless such materials are burned by smokeless flares, or an equally effective control equipment as approved by the director.
(3) The provisions of paragraphs (J)(1) and (J)(2) of this rule shall not apply to emissions from emergency relief and vapor blowdown systems. Emissions from emergency relief and vapor blowdown systems shall be controlled upon special order of the director by burning by smokeless flare, or equally effective control equipment as may be approved by the director.

The following monitoring and record keeping requirements are required by special order of the Director in the August 19, 1987 Director's Final Findings and Orders. The permittee shall maintain records and submit reports which provide the following information for each known relief which results in non-smokeless operation of the flare(s):

i. the date, time and duration of the relief;

ii. the flare(s) involved;

iii. the process unit(s) associated with the relief;

iv. the cause of the relief; and,

v. an explanation of why the relief was non-smokeless.

These reports shall be submitted within 15 days of the end of each calendar quarter.

4. **3745-21-09 Control of emissions of volatile organic compounds from stationary sources and perchloroethylene from dry cleaning facilities.**

a. [OAC rule 3745-21-09(L)] **Storage of petroleum liquids in fixed roof tanks.**

[The following emissions units contained in this permit are subject to OAC rule 3745-21-09(L): T010, T011, T012, T013, T014, T015, T045, T046, T047, T051, T053, T055, T056, T058, T063, T064, T066, T074, T075, T076, T077, T078, T079, T080, T081, T082, T086, T087, T088, T089, T092, T093, T099, T100, T101, T106, T107, T108, T109, T110, T111, T113, T114, T115, T116, T136, T137, T138, T139, T164, T170, T175, T176, T177, T178, T179, T180, T181, T182, T183, T184, T185, and T186.]

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(L) [see Part II] by demonstrating compliance with the storage tank standards in 40 CFR Part 63, Subpart CC [Part II, sections A.63 through A.77]. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the requirements of OAC rule 3745-21-09(L).]

(1) 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 rule 3745-21-04 of the Administrative Code unless such tank, is designed or equipped as follows, except where exempted under paragraph (L)(2) of this rule:

(a) Vapor control equipment which is one of the following:

(i) Internal floating roof; or

(ii) Alternative equivalent control for VOC emissions as may be approved by the director.

(b) 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.

(c) 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.

(d) Other means for reducing the emission of VOC into the ambient air as may be required by the director.

(2) The following tanks are exempted from paragraph (L)(1) of this rule:

(a) Fixed roof tank with a capacity less than forty thousand gallons; and

(b) Fixed roof tank with a capacity less than four hundred twenty-two thousand gallons and used to store produced crude oil and condensate prior to lease custody transfer.

(3) Any owner or operator of a fixed roof tank that is not exempted pursuant to paragraph (L)(2) of this rule shall maintain records of the following information in a readily accessible location for at least five years and shall make copies of the records available to the director upon verbal or written request.

(a) The types of petroleum liquids stored in the tank.

(b) The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater 1.0 pound per square inch absolute.

(4) If an owner or operator places, stores, or holds in a fixed roof tank, that is not exempted pursuant to paragraph (L)(2) of this rule, any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of paragraph (L)(1) of this rule, the owner or operator shall so notify the director within thirty days of becoming aware of the occurrence.

b. [OAC rule 3745-21-09(M)] **Refinery vacuum producing systems, wastewater separators, and process unit turnarounds.**

[The following emissions units contained in this permit are subject to OAC rule 3745-21-09(M): P010, P011, and P025.]

(1) Each owner or operator of a petroleum refinery shall control the emissions of VOC from any vacuum producing systems no later than the date specified in paragraph (C)(12) of rule 3745-21-04 of the Administrative Code by piping the vapors to an appropriate firebox or incinerator, or by compressing the vapors and adding them to the refinery fuel gas system.

(2) 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, each owner or operator of a petroleum refinery shall control the emissions of VOC from any wastewater separator no later than the date specified in paragraph (C)(13) of rule 3745-21-04 of the Administrative Code by equipping all forebay sections and other separator sections with covers and seals which minimize the amount of oily water exposed to the ambient air. In addition, all covers and forebay and separator sections shall be equipped with lids and seals which are kept in a closed position at all times except when in actual use.

(3) Process unit turnarounds

(a) Each owner or operator 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.

(b) Each owner or operator of a petroleum refinery shall maintain records for a minimum of two years for each process unit turnaround. Such records shall include:

(i) The date the unit was shut down;

(ii) The approximate pressure of the vapors in the process vessel when the VOC emissions were first discharged to the ambient air; and

(iii) The approximate total quantity of VOC emitted to the ambient air.

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

[The following emissions units contained in this permit are subject to OAC rule 3745-21-09(T): J001, J004, J005, J006, P007, P009, P010, P011, P014, P017, P019, P020, P021, P022, P023, P028, P029, P036, P037, P041, P042, P043, P046, P047, P059, P060, P061, and P802.]

[Note: Consistent with U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

(1) Except as otherwise provided in paragraphs (T)(1)(b) and (T)(1)(c) of this rule, each owner or operator of a petroleum refinery shall comply with the following monitoring, record-keeping and reporting requirements no later than the date specified in paragraph (C)(27) of rule 3745-21-04 of the Administrative Code:

(a) Except as otherwise indicated in paragraph (T)(1)(b) of this rule, a monitoring program shall be developed and implemented which incorporates the following provisions:

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

(ii) Quarterly monitoring of all compressor seals, pipeline valves in gas service and pressure relief valves in gas service in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code;

(iii) Monthly monitoring of all pump seals by visual methods;

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

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

(vi) Monitoring of any component in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code 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, valves which are located in pipelines containing kerosene or heavier liquids, storage tank valves and valves which are not externally regulated are exempt from the monitoring requirements contained in paragraph (T)(1)(a) of this rule;

(c) For any pipeline or pressure relief valves in gas or liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in paragraph (T)(1)(a) of this rule as follows:

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

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

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

(c) The owner or operator of the valve has a written plan that requires monitoring of the valve at least once per year;

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

(a) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a quarterly or yearly basis as specified in paragraph (T)(1)(a) of this rule; and

(b) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during process unit turnarounds and other safe to monitor times;

(d) All pipeline valves in gas service and pressure relief valves in gas service shall be clearly marked and identified in such a manner that they will be obvious to both refinery personnel performing monitoring and to the director;

(e) If a leak is identified as a result of the monitoring program required by paragraph (T)(1)(a) of this rule and the concentration of VOC exceeds ten thousand parts per million by volume, a tag shall immediately be placed on the leaking component. The tag shall be readily visible and weatherproof; it shall bear an identification number; and it shall clearly indicate the date the leak was detected. The tag shall remain in place until the leaking component is repaired;

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

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

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

(iii) The tag number of the leaking component;

(iv) The date on which the leaking component was detected;

(v) The date on which the leaking component was repaired;

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

(vii) A record of the calibration of the monitoring instrument;

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

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

(g) A copy of any monitoring log shall be retained by the owner or operator 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 of the director, upon verbal or written request, at any reasonable time; and

(i) A report shall be submitted to the director by the fifteenth day of January, April, July and October that gives the total number of components monitored during the previous three calendar months, gives the total number of components found leaking during the previous three calendar months, identifies all components which were found leaking during the previous three calendar months but which were not repaired within fifteen days and identifies all leaking components which cannot be repaired until the next process unit turnaround.

(2) Any owner or operator of a petroleum refinery shall repair and retest any leaking component, which is tagged and identified in accordance with paragraph (T)(1)(e) of this rule, as soon as possible but no later than fifteen days after the leak is found unless the leaking component cannot be repaired until a process unit turnaround occurs.

(3) The director may require a process unit turnaround to occur earlier than the normally scheduled date if the number and severity of leaking components awaiting a turnaround warrant such action. Any such process unit turnaround shall be required by means of an order issued by the director to the owner or operator of the petroleum refinery pursuant to division (R) of section 3704.03 of the Revised Code.

(4) The director may accept an alternative monitoring, record keeping and reporting program for that required by paragraph (T)(1) of this rule if the owner or operator of a petroleum refinery can demonstrate to the satisfaction of the director that the alternative program is at least as effective in identifying, documenting and reporting leaks from petroleum refinery equipment as the program outlined in paragraph (T)(1) of this rule. For purposes of this paragraph, any proposed alternative program which the director finds comparable to the requirements of paragraph (DD)(12) or (DD)(13) of this rule shall be acceptable to the director.

d. [OAC rule 3745-21-09(Z)] **Storage of petroleum liquids in external floating roof tanks.**

[The following emissions units contained in this permit are subject to OAC rule 3745-21-09(Z): T016, T017, T018, T019, T020, T021, T024, T025, T026, T027, T028, T029, T030, T031, T032, T033, T034, T035, T036, T037, T038, T039, T040, T041, T044, T059, T060, T073, T084, T085, T090, T091, T096, T097, T102, T120, T166, T167, T174, T187, and T188.]

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(Z) [see Part II, section A.4.d] by demonstrating compliance with the storage tank standards in 40 CFR Part 63, Subpart CC [Part II, sections A.63 through A.77]. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the requirements of OAC rule 3745-21-09(Z).]

(1) Except where exempted under paragraph (Z)(3) of this rule, no owner or operator of an external floating roof tank shall place, store, or hold any petroleum liquid in any such tank after the date specified in paragraph (C)(33) of rule 3745-21-04 of the Administrative Code, 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";

(b) Each seal meets the following requirements:

(i) There are no visible holes, tears, or other openings in the seal or seal fabric;

(ii) If the tank is of welded construction, the total seal gap area, as determined under paragraph (I) of rule 3745-21-10 of the Administrative Code, does not exceed:

(a) 10.0 square inches per foot of tank diameter for a liquid-mounted primary seal or mechanical shoe primary seal;

(b) 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;

(c) 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;

(d) 1.0 square inch per foot of tank diameter for a rim-mounted secondary seal or shoe-mounted secondary seal; or

(e) The amount which is assigned by the director for any seal which is equivalent under paragraph (Z)(1)(a)(vii) of this rule;

(iii) If the tank is of riveted construction, the maximum seal gap width, as determined under paragraph (I) of rule 3745-21-10 of the Administrative Code, does not exceed:

(a) 2.5 inches for a mechanical shoe primary seal;

(b) 1.5 inches for a liquid-mounted primary seal, vapor-mounted primary seal, flexible wiper primary seal, shoe-mounted secondary seal or rim-mounted secondary seal; or

(c) The amount which is assigned by the director for any seal which is equivalent under paragraph (Z)(1)(a)(vii) of this rule;

(c) Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, is equipped with:

(i) A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use; and

(ii) A projection into the tank below the liquid surface;

(d) Any automatic bleeder vent remains in the closed position, except when the external floating roof is floated off or landed on the roof leg supports;

(e) Any rim vent is set to open only at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports;

(f) Any emergency roof drain is equipped with a slotted membrane fabric cover or other device which covers at least ninety per cent of the area of the opening;

(g) Any stub drain is equipped with a projection into the tank below the liquid surface; and

(h) Any slotted gauging/sampling well is 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.

(2) Except where exempted under paragraph (Z)(3) of this rule, each owner or operator of an external floating roof tank which contains a petroleum liquid shall meet the following inspection, record keeping and reporting requirements:

(a) Inspect annually any 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 rule 3745-21-10 of the Administrative Code, the secondary seal gap or the primary seal gap, if there is no secondary seal, for compliance with the seal gap requirements of paragraph (Z)(1)(b)(ii) or (Z)(1)(b)(iii) of this rule;

(c) Measure at least once every five years, in accordance with the method specified in paragraph (I) of rule 3745-21-10 of the Administrative Code, the primary seal gap, if there is a secondary seal, for compliance with the seal gap requirements of paragraph (Z)(1)(b)(ii) or (Z)(1)(b)(iii) of this rule;

(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 paragraphs (Z)(2)(a) to (Z)(2)(c) of this rule; and

(ii) The annual throughput of any petroleum liquid stored in the tank; and

(e) 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 under paragraph (Z)(2)(d) of this rule.

(3) The following external floating roof tanks shall be exempted from the requirements of paragraphs (Z)(1) and (Z)(2) of this rule:

(a) Any tank which has a capacity of less than forty thousand gallons;

(b) Any tank which has a capacity of less than four hundred twenty thousand gallons and which is used to store produced crude oil or condensate prior to custody transfer; and

(c) Any tank which contains a petroleum liquid which, as stored, has a maximum true vapor pressure less than 1.5 pounds per square inch absolute.

(4) Any owner or operator of an external floating roof tank that is not exempted pursuant to paragraph (Z)(3)(a) or (Z)(3)(b) of this rule shall maintain records of the following information in a readily accessible location for at least five years and shall make copies of the records available to the director upon verbal or written request:

(a) The types of petroleum liquids stored in the tank.

(b) The maximum true vapor pressure (pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

(5) If an owner or operator places, stores, or holds in an external floating roof tank, that is not exempted pursuant to paragraph (Z)(3)(a) or (Z)(3)(b) of this rule, any petroleum liquid with a true vapor pressure which is greater than 1.5 pounds per square inch absolute and such tank does not comply with the requirements of paragraph (Z)(1) of this rule, the owner or operator shall so notify the director within thirty days of becoming aware of the occurrence.

e. [OAC rule 3745-21-09(DD)] **Leaks from process units that produce organic chemicals.**

[Note: The permittee does not produce organic chemicals, however, paragraph (DD) is referenced by OAC rule 3745-21-09(T), OAC rule 3745-21-09(UU), and a Best Available Technology determination under OAC rule 3745-31-05(A)(3) for emissions unit P017.]

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

(2) Leak detection and repair program.

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

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

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

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

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

(a) Any pump in heavy liquid service;

(b) Any valve in heavy liquid service;

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

(d) Any flange or other connector.

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

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

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

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

(b) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface.

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

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

(a) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis.

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

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

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

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

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

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

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

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

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

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

(g) A leak is detected:

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

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

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

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

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

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

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

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

(i) When a leak is detected as described in paragraph (DD)(2)(g) of this rule, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in paragraph (DD)(11) of this rule. Leaking equipment shall be deemed repaired if

the maximum concentration measured pursuant to paragraph (DD)(2)(b)(iv) of this rule is less than ten thousand ppmv.

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

(i) Tightening of bonnet bolts;

(ii) Replacement of bonnet bolts;

(iii) Tightening of packing gland nuts; and

(iv) Injection of lubricant into lubricated packing.

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

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

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

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

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

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

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

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

(i) The actual reading in ppmv; or

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

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

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

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

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

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

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

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

(l) The leak repair log shall be retained by the owner or operator of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.

(m) Semiannual reports shall be submitted to the director by the first day of February and August and shall include the following information for the preceding semiannual periods:

(i) The process unit identification;

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

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

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

(v) For each month during the semiannual period:

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

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

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

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

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

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

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

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

(3) Compressors.

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

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

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

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

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

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

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

(4) Pressure relief devices in gas/vapor service.

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

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

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

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

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

(5) Sampling connection system.

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

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

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

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

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

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

(6) Open-ended valves or lines.

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

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

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

(d) If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with paragraph (DD)(6)(b) of this rule at all other times.

(7) Equipment designated for no detectable emissions.

(a) Any equipment (pump, valve, or compressor) designated for no detectable emissions pursuant to paragraph (DD)(2)(d)(i), (DD)(2)(d)(iv) or (DD)(3)(c) of this rule shall comply with the requirements specified in paragraphs (DD)(7)(b) to (DD)(7)(d) of this rule.

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

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

(d) The designation of the equipment shall be signed by the owner or operator of the equipment in the log kept pursuant to paragraph (DD)(14)(b) of this rule.

(8) Barrier fluid systems and sensors for pumps and compressors.

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

(b) The barrier fluid system shall meet one of the following conditions:

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

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

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

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

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

(9) Closed vent systems.

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

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

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

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

(10) Control equipment.

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

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

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

(d) If the control equipment is a flare, it shall meet the following requirements:

(i) The flare shall be designed for and operated with no visible emissions as determined by "Method 22, 40 CFR, Part 60, Appendix A," except for periods not to exceed a total of five minutes during any one hundred twenty consecutive minutes.

(ii) The flare shall be operated with either an electric arc ignition system or a pilot flame. If a pilot flame is employed, the flame shall be present at all times and shall be monitored with a thermocouple or any other equivalent device to detect the presence of the pilot flame. If an electric arc ignition system is employed, the arcing shall pulse continually and shall be monitored to detect any failure.

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

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

(v) Except as provided in paragraph (DD)(10)(d)(vi) of this rule, the flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, less than sixty feet per second if the flare is steam-assisted or nonassisted, or less than the maximum permitted velocity, as determined in paragraph (P)(4) of rule 3745-21-10 of the Administrative Code, if the flare is air-assisted.

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

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

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

(e) The owner or operator of the control equipment shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.

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

(11) Delay of repair.

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

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

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

(d) A delay of repair for a valve shall be allowed if:

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

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

(e) A delay of repair for a pump shall be allowed if:

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

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

(f) A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.

(12) Alternative monitoring schedule for valves based on a skip period.

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

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

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

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

(e) One of the following two alternative work practices for skipping monitoring periods may be implemented:

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

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

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

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

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

(i) A schedule of monitoring; and

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

(13) Alternative monitoring standard for valves based on the allowable percentage of valves leaking.

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

(b) The owner or operator must notify the director prior to implementing this alternative monitoring standard.

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

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

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

(f) A compliance test shall be conducted in the following manner:

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

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

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

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

(14) Record keeping.

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

(b) The following information shall be recorded in a log that is kept in a readily accessible location:

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

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

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

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

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

(a) The date of each compliance test;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(15) Reporting.

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

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

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

(d) Any semiannual reports required under paragraph (DD)(2)(m) of this rule may be sent to the Ohio environmental protection agency district office or delegate agency.

(16) Equivalent requirement.

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

(b) The owner or operator applying for a determination of equivalency shall be responsible for collecting and verifying test data to demonstrate the proposed equivalence.

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

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

(17) Exemptions.

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

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

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

(iii) Any process unit that produces beverage alcohol;

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

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

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

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

(ii) Any equipment in vacuum service; and

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

f. [OAC rule 3745-21-09(UU)] **"British Petroleum Company, Toledo Refinery" or any subsequent owner or operator of the "British Petroleum Company, Toledo Refinery" facility located at 4001 Cedar Point Road, Oregon, Ohio shall comply with the following requirements for VOC emissions:**

[The following emissions units contained in this permit are subject to OAC rule 3745-21-09(UU): P017, P021, P022, P023, P025, and P043.]

(1) On and after the date specified in paragraph (C)(55)(a) of rule 3745-21-04 of the Administrative Code, all VOC emissions from the SPOP waterwash tower spentwash flash drum and the POLY waterwash tower spentwash flash drum shall be vented to a flare that complies with the requirements of paragraph (DD)(10)(d) of this rule.

(2) On and after the date specified in paragraph (C)(55)(b) of rule 3745-21-04 of the Administrative Code, all VOC emissions from the alkyl 1 blowdown drum and the alkyl 2 blowdown drum shall be vented to a flare that complies with the requirements of paragraph (DD)(10)(d) of this rule.

(3) On and after the date specified in paragraph (C)(55)(b) of rule 3745-21-04 of the Administrative Code, all VOC emissions from the cokers 1 and 2 blowdown drum shall be vented to a flare that complies with the requirements of paragraph (DD)(10)(d) of this rule.

(4) On and after the date specified in paragraph (C)(55)(c) of rule 3745-21-04 of the Administrative Code, 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 paragraph (DD)(10)(d) of this rule.

(5) On and after the date specified in paragraph (C)(55)(d) of rule 3745-21-04 of the Administrative Code, the barometric condensers and hot wells serving crude vacuum unit 1 and associated with cooling tower cell 6 shall be replaced with surface condensers (shell and tube heat exchangers).

(6) On and after the date specified in paragraph (C)(55)(e) of rule 3745-21-04 of the Administrative Code, the barometric condensers and hot wells serving crude vacuum unit 2 and associated with cooling tower cell 7 shall be replaced with surface condensers (shell and tube heat exchangers).

5. The list of emissions units previously contained in this section has been moved to Part II, section A.160. This section (A.5) has been placed in reserve so that the current numbering sequence in Part II can be maintained to avoid numerous referencing errors within the permit.

Subpart VV—Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

[Note: the permittee is not subject to 40 CFR Part 60, Subpart VV. However, 40 CFR Part 60, Subpart VV is referenced by 40 CFR Part 60, Subpart GGG and Part 63, Subpart CC.]

6. **40 CFR 60.480 Applicability and designation of affected facility.**

(a) (1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

(2) The group of all equipment (defined in §60.481) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this sectio n that commences construction or modification after January 5, 1981, shall be subject to the requirements of this subpart.

(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d) (1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in §60.486(i).

(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) is exempt from §60.482.

(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from §60.482.

(4) Any affected facility that produces beverage alcohol is exempt from §60.482.

(5) Any affected facility that has no equipment in VOC service is exempt from §60.482.

(e) *Alternative means of compliance.*

(1) *Option to comply with part 65.* Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of §60.485(d), (e), and (f), and §60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart F must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for that equipment. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of equipment subject to this subpart complying with 40 CFR part 65, subpart F, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart F, must comply with 40 CFR part 65, subpart A.

7. **40 CFR 60.482-1 Standards: General.**

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482-1 through 60.482-10 or §60.480(e) for all equipment within 180 days of initial startup.

(b) Compliance with §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485.

(c) (1) An owner or operator 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 as provided in §60.484.

(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of §§60.482-2 to 60.482-10 if it is identified as required in §60.486(e)(5).

8. **40 CFR 60.482-2 Standards: Pumps in light liquid service.**

(a) (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in §60.482-1(c) and paragraphs (d), (e), and (f) of this section.

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

(b) (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

(c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9.

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

(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:

(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 §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.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

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

(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5) (i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(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 paragraph (d)(5)(ii), a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9.

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

(e) Any pump that is designated, as described in §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 paragraphs (a), (c), and (d) of the section if the pump:

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

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485(c), and

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

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

(g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and

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

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

9. **40 CFR 60.482-3 Standards: Compressors.**

(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) and paragraph (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) shall be:

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

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482-10; or

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

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

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

(e) (1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.

(2) The owner or operator 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) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.

(g) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9.

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

(h) A compressor is exempt from the requirements of paragraphs (a) and (b), 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, except as provided in paragraph (i) of this section.

(i) Any compressor that 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, is exempt from the requirements of paragraphs (a)-(h)if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §60.485(c); and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of §60.14 or §60.15 is exempt from §60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator 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.

10. **40 CFR 60.482-4 Standards: Pressure relief devices in gas/vapor service.**

(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).

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

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482-10 is exempted from the requirements of paragraphs (a) and (b) of this section.

(d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(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 §60.482-9.

11. **40 CFR 60.482-5 Standards: Sampling connection systems.**

(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). Gases displaced during filling of the sample container are not required to be collected or captured.

(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)(1) through (4) of this section:

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

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

(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482-10; or

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

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

(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.

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

12. **40 CFR 60.482-6 Standards: Open-ended valves or lines.**

(a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1(c).

(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.

(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) 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) at all other times.

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

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

13. **40 CFR 60.482-7 Standards: Valves in gas/vapor service in light liquid service.**

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), §60.483-1, 2, and §60.482-1(c).

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

(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.

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

(d) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482-9.

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

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in §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 paragraph (a) if the valve:

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

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and

(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator 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), and

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

14. **40 CFR 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.**

(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:

(1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.

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

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

(c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9.

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

(d) First attempts at repair include, but are not limited to, the best practices described under §60.482-7(e).

15. **40 CFR 60.482-9 Standards: Delay of repair.**

(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.

(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) Delay of repair for valves will be allowed if:

(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482-10.

(d) Delay of repair for pumps will be allowed if:

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

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

(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.

16. **40 CFR 60.482-10 Standards: Closed vent systems and control devices.**

(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.

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

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

(d) Flares used to comply with this subpart shall comply with the requirements of §60.18.

40 CFR 60.482-10(e)

(e) Owners or operators 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) 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)(1) and (f)(2) of this section.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

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

(2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

(ii) Conduct annual inspections according to the procedures in §60.485(b).

(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.

40 CFR 60.482-10(g)(1)

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

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

(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 owner or operator 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) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.

(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i)and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and

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

(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i)and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:

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

(2) The process unit within which the closed vent system is located becomes an affected facility through §§60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The owner or operator 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) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in §60.486(c).

(4) For each inspection conducted in accordance with §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

40 CFR 60.482-10(m)

(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.

17. **40 CFR 60.483-1 Alternative standards for valves—allowable percentage of valves leaking.**

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §60.487(d).

(2) 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 Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with §60.482-7(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in §60.485(b).

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

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

(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

18. **40 CFR 60.483-2 Alternative standards for valves-skip period leak detection and repair.**

(a) (1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §60.487(d).

(b) (1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in §60.482-7.

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

40 CFR 60.483-2(b)(3)

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §60.482-7 but can again elect to use this section.

(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

19. **40 CFR 60.484 Equivalence of means of emission limitation.**

(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalance 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) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

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

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

(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:

(1) Each owner or operator 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.

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

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

(4) Each owner or operator 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.

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

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

(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

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

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

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

(f) (1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.

20. **40 CFR 60.485 Test methods and procedures.**

(a) In conducting the performance tests required in §60.8, the owner or operator 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 §60.8(b).

(b) The owner or operator shall determine compliance with the standards in §§60.482, 60.483, and 60.484 as follows:

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

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

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

(c) The owner or operator 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) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference-see §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.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.

40 CFR 60.485(e)

(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C (1.2 in. H_20 at 68°F. Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference-see §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20°C (1.2 in. H_20 at 68°F is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(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) The owner or operator shall determine compliance with the standards of flares as follows:

(1) Method 22 shall be used to determine visible emissions.

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

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

Where:
V_{max} = Maximum permitted velocity, m/sec (ft/sec)
H_T = Net heating value of the gas being combusted, MJ/scm (Btu/scf).
K_1 = 8.706 m/sec (metric units)
= 28.56 ft/sec (English units)
K_2 = 0.7084 m^4/(MJ-sec) (metric units)
= 0.087 ft^4/(Btu-sec) (English units)

(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:
K = Conversion constant, 1.740×10^7 (g-mole)(MJ)/ (ppm-scm-kcal) (metric units)
= 4.674×10^8 [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)
C_i = Concentration of sample component "i," ppm
H_i = net heat of combustion of sample component "i" at 25°C and 760 mm Hg (77°F and 14.7 psi), kcal/g-mole

(5) Method 18 and ASTM D 2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference-see §60.17) shall be used to determine the concentration of sample component "i."

(6) ASTM D 2382-76 or 88 or D4809-95 (incorporated by reference-see §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.

(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.

21. **40 CFR 60.486 Record keeping requirements.**

(a) (1) Each owner or operator subject to the provisions of this subpart shall comply with the record keeping requirements of this section.

(2) An owner or operator 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) When each leak is detected as specified in §§60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply:

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

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7(c) and no leak has been detected during those 2 months.

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

(c) When each leak is detected as specified in §§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:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

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

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

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

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482-10 shall be recorded and kept in a readily accessible location:

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

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

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

(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 are not operated as designed, including periods when a flare pilot light does not have a flame.

(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.

(e) The following information pertaining to all equipment subject to the requirements in §§60.482-1 to 60.482-10shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of §60.482-2(e), §60.482-3(i), or §60.482-7(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4.

(4) (i) The dates of each compliance test as required in §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

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

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

(5) A list of identification numbers for equipment in vacum service.

(f) The following information pertaining to all valves subject to the requirements of §60.482-7(g) and (h) and to all pumps subject to the requirements of §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

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

(g) The following information shall be recorded for valves complying with §60.483-2:

(1) A schedule of monitoring.

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

(h) The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in §§60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and

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

(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 §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(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

(3) An analysis demonstrating that equipment is not in VOC service.

(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) The provisions of §60.7(b) and (d) do not apply to affected facilities subject to this subpart.
(Approved by the Office of Management and Budget under control number 2060-0012)

22. **40 CFR 60.487 Reporting requirements.**

(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 start up date.

(b) The initial semiannual report to the Administrator shall include the following information:

(1) Process unit identification.

(2) Number of valves subject to the requirements of §60.482-7, excluding those valves designated for no detectable emissions under the provisions of §60.482-7(f).

(3) Number of pumps subject to the requirements of §60.482-2, excluding those pumps designated for no detectable emissions under the provisions of §60.482-2(e) and those pumps complying with §60.482-2(f).

(4) Number of compressors subject to the requirements of §60.482-3, excluding those compressors designated for no detectable emissions under the provisions of §60.482-3(i) and those compressors complying with §60.482-3(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486:

(1) Process unit identification.

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

(i) Number of valves for which leaks were detected as described in §60.482(7)(b) or §60.483-2,

(ii) Number of valves for which leaks were not repaired as required in §60.482-7(d)(1),

(iii) Number of pumps for which leaks were detected as described in §60.482-2(b) and (d)(6)(i),

(iv) Number of pumps for which leaks were not repaired as required in §60.482-2(c)(1) and (d)(6)(ii),

(v) Number of compressors for which leaks were detected as described in §60.482-3(f),

(vi) Number of compressors for which leaks were not repaired as required in §60.482-3(g)(1), and

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

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

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

(d) An owner or operator electing to comply with the provisions of §§60.483-1 or 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §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.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.

Subpart GGG—Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries

[The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart GGG: J005, P007, P010, P011, P017, P020, P022, P023, P028, P029, P036, P037, P038, P041, P059, P060, P802, and Z003 (Butane Vapor Recovery Unit)]

[Per 40 CFR 63.640(p): After the compliance dates specified in 40 CFR 63.640(h), equipment leaks that are also subject to 40 CFR Part 60 and 61 are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.]

23. **40 CFR 60.590 Applicability and designation of affected facility.**

(a) (1) The provisions of this subpart apply to affected facilities in petroleum refineries.

(2) A compressor is an affected facility.

(3) The group of all the equipment (defined in §60.591) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 4, 1983, is subject to the requirements of this subpart.

(c) Addition or replacement of equipment (defined in §60.591) for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d) Facilities subject to subpart VV or subpart KKK of 40 CFR part 60 are excluded from this subpart.

24. 40 CFR 60.592 Standards.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the requirements of §§60.482-1 to 60.482-10 as soon as practicable, but no later than 180 days after initial startup.

(b) An owner or operator may elect to comply with the requirements of §§60.483-1 and 60.483-2.

(c) An owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart. In doing so, the owner or operator shall comply with requirements of §60.484.

(d) Each owner or operator subject to the provisions of this subpart shall comply with the provisions of §60.485 except as provided in §60.593.

(e) Each owner or operator subject to the provisions of this subpart shall comply with the provisions of §§60.486 and 60.487.

25. **40 CFR 60.593 Exceptions.**

(a) Each owner or operator subject to the provisions of this subpart may comply with the following exceptions to the provisions of subpart VV.

(b) (1) Compressors in hydrogen service are exempt from the requirements of §60.592 if an owner or operator demonstrates that a compressor is in hydrogen service.

(2) Each compressor is presumed not be be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E260-73, 91, or 96, E168-67, 77, or 92, or E169-63, 77, or 93 (incorporated by reference as specified in §60.17) shall be used.

(3) (i) An owner or operator may use engineering judgment rather than procedures in paragraph (b)(2) of this section to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures in paragraph (b)(2) shall be used to resolve the disagreement.

(ii) If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures in paragraph (b)(2).

(c) Any existing reciprocating compressor that becomes an affected facility under provisions of §60.14 or §60.15is exempt from §60.482 (a), (b), (c), (d), (e), and (h) provided the owner or operator 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 §60.482(a), (b), (c), (d), (e), and (h).

(d) An owner or operator may use the following provision in addition to §60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150°C as determined by ASTM Method D86-78, 82, 90, 95, or 96 (incorporated by reference as specified in §60.18).

(e) Pumps in light liquid service and valves in gas/vapor and light liquid service within a procesic compounds of usually high molecular weight that consist of many repeated links, each link being a relatively light and simple molecule.

40 CFR Part 63, Subpart A—General Provisions

[Note: To determine applicability of Subpart A General Provisions, see: Table 6 of 40 CFR Part 63 Subpart CC for emissions units subject to Subpart CC; Table 44 of 40 CFR Part 63 Subpart UUU for emissions units P007, P009, P019, P020, P037, and P061.]

26. **40 CFR 63.1 Applicability.**

(a) *General.*

(1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

(4) (i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.

(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.

(7) [Reserved]

(8) [Reserved]

(9) [Reserved]

(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the

Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i).

(13) [Removed]

(14) [Removed]

(b) *Initial applicability determination for this part*.

(1) The provisions of this part apply to the owner or operator of any stationary source that—

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) [Reserved]

(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3).

(c) *Applicability of this part after a relevant standard has been set under this part*.

(1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4)of this section.

(2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether—

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.

(3) [Reserved]

(4) [Reserved]

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.

(d) [Reserved]

(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section

112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

27. **40 CFR 63.6 Compliance with standards and maintenance requirements.**

(a) *Applicability*.

(1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with §63.1(a)(4) unless—

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

(b) *Compliance dates for new and reconstructed affected sources.*

(1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.

(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to sections 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:

(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are "more stringent" must include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.

(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with §63.9(d).

(6) [Reserved]

(7) When an area source becomes a major source by the addition of equipment or operations that meet the definition of new affected source in the relevant standard, the portion of the existing facility that is a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.

(c) *Compliance dates for existing sources*.

(1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part. Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.

(2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii)of this section, whichever is later.

(3) [Reserved]

(4) [Reserved]

(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources. Such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.

(d) [Reserved]

(e) *Operation and maintenance requirements*.

(1) (i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(ii) Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) [Reserved]

(3) *Startup, Shutdown, and Malfunction Plan*.

(i) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to—

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (e)(3)(i) of this section.

(iii) When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of record keeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the owner or operator must keep records of these events as specified in §63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in §63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii)of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the

possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The Administrator must request that the owner or operator submit a particular startup, shutdown, or malfunction plan (or a portion thereof) whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a plan. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(1)(i)of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in §63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by §63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

(ix) The title V permit for an affected source must require that the owner or operator adopt a startup, shutdown, and malfunction plan which conforms to the provisions of this part, and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and

malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

(f) *Compliance with nonopacity emission standards*—

(1) *Applicability.* The non-opacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

(2) *Methods for determining compliance*.

(i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in §63.7, unless otherwise specified in an applicable subpart of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in §63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in §63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) *Finding of compliance*. The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g) *Use of an alternative nonopacity emission standard*.

(1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any FEDERAL REGISTER notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for

compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with §63.7 and §63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in §63.7 and §63.8.

(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

(h) *Compliance with opacity and visible emission standards*—

(1) *Applicability*. The opacity and visible emission standards set forth in this part must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

(2) *Methods for determining compliance*.

(i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.

(ii) [Reserved]

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;

(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e); and

(D) The opacity or visible emission test was appropriately quality-assured, as specified in §63.7(c) of this section.

(3) [Reserved]

(4) *Notification of opacity or visible emission observations*. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with §63.9(f), if such observations are required for the source by a relevant standard.

(5) *Conduct of opacity or visible emission observations*. When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in §63.7 unless one of the following conditions applies:

(A) If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in Appendix A of part 60 of this chapter.

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).

(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of §63.10(d).

(iv) [Reserved]

(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.

(6) *Availability of records*. The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

(7) *Use of a continuous opacity monitoring system*.

(i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of §63.10(e)(4).

(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see Appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under §63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in writing, simultaneously with the notification under §63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under §63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under §63.7(b) of the date the subsequent performance test is scheduled to begin.

(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under §63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of §63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in §63.8(c) and §63.8(d), and that the resulting data have not been altered in any way.

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in §63.8(c), and met Performance Specification 1 in Appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

(8) *Finding of compliance*. The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by §63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(9) *Adjustment to an opacity emission standard*.

(i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under §63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that—

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

(B) The performance tests were performed under the conditions established by the Administrator; and

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity emission standard in the FEDERAL REGISTER.

(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

(i) *Extension of compliance with emission standards*.

(1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) *Extension of compliance for early reductions and other reductions*—

(i) *Early reductions*. Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved

permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.

(ii) *Other reductions*. Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) [as defined in section 169(3) of the Act] or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) *Request for extension of compliance*. Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part [except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part].

(4) (i) (A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the dateof denial. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B)of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (i)(6)(i) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a

relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(6) (i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(1) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and

(2) The date by which final compliance is to be achieved.

(3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(4) The date by which final compliance is to be achieved;

(C) [Reserved]

(D) [Reserved]

(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(8) *Approval of request for extension of compliance*. Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

(10) The extension will be in writing and will—

(i) Identify each affected source covered by the extension;

(ii) Specify the termination date of the extension;

(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

(v) (A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or

(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance

schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.

(12) (i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(13) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (i)(10)(iii) or (iv) of this

section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(i) Notice of the reason for termination; and

(ii) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(iii) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(15) [Reserved]

(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(j) *Exemption from compliance with emission standards*. The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

28. **40 CFR 63.7 Performance testing requirements.**

(a) *Applicability and performance test dates*.

(1) The applicability of this section is set out in §63.1(a)(4).

(2) If required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.

(i)-(viii) [Reserved]

(ix) When an emission standard promulgated under this part is more stringent than the standard proposed [see §63.6(b)(3)], the owner or operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

(b) *Notification of performance test*.

(1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review an approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable

Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(c) *Quality assurance program*.

(1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

(2) (i) *Submission of site-specific test plan*. Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

(iii) The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Administrator and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.

(3) *Approval of site-specific test plan*.

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i)of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the

preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) (i) *Performance test method audit program.* The owner or operator must analyze performance audit (PA) samples during each performance test. The owner or operator must request performance audit materials 30 days prior to the test date. Audit materials including cylinder audit gases may be obtained by contacting the appropriate EPA Regional Office or the responsible enforcement authority.

(ii) The Administrator will have sole discretion to require any subsequent remedial actions of the owner or operator based on the PA results.

(iii) If the Administrator fails to provide required PA materials to an owner or operator of an affected source in time to analyze the PA samples during a performance test, the requirement to conduct a PA under this paragraph shall be waived for such source for that performance test. Waiver under this paragraph of the requirement to conduct a PA for a particular performance test does not constitute a waiver of the requirement to conduct a PA for future required performance tests.

(d) *Performance testing facilities*. If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

(e) *Conduct of performance tests*.

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under §63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61 and 63 of this chapter unless the Administrator—

(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in §63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or

(ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in §63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that—

(i) A sample is accidentally lost after the testing team leaves the site; or

(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

(iii) Extreme meteorological conditions occur; or

(iv) Other circumstances occur that are beyond the owner or operator's control.

(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(f) *Use of an alternative test method—*

(1) *General.* Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator—

(i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and

(iii) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2)of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under §63.7(f).

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.

(g) *Data analysis, record keeping, and reporting*.

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator [see §63.9(i)]. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h). Before a title Vpermit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) [Reserved]

(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

(h) *Waiver of performance tests*.

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) *Request to waive a performance test*.

(i) If a request is made for an extension of compliance under §63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under §63.6(i), §63.9(h), and §63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) *Approval of request to waive performance test*. The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she—

(i) Approves or denies an extension of compliance under §63.6(i)(8); or

(ii) Approves or disapproves a site-specific test plan under §63.7(c)(3); or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

29. **40 CFR 63.8 Monitoring requirements.**

(a) *Applicability*.

(1) The applicability of this section is set out in §63.1(a)(4).

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]

(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in §63.11.

(b) *Conduct of monitoring*.

(1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator—

(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see §63.90(a) for definition); or

(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see §63.90(a) for definition).

(iii) Owners or operators with flares subject to §63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.

(2) (i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.

(ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is—

(A) Approved by the Administrator; or

(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).

(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.

(c) *Operation and maintenance of continuous monitoring systems*.

(1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

(i) The owner or operator of an affected source must maintain and operate each CMS as specified in §63.6(e)(1).

(ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

(iii) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan for CMS as specified in §63.6(e)(3).

(2) (i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).

(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under §63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(i) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(5) Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internalsystem check, results must be recorded and checked daily for proper operation.

(7) (i) A CMS is out of control if—

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in §63.10(e)(3).

(d) *Quality control program*.

(1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventive maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.

(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and record keeping efforts.

(e) *Performance evaluation of continuous monitoring systems—*

(1) *General*. When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

(2) *Notification of performance evaluation*. The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under §63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

(3) (i) *Submission of site-specific performance evaluation test plan*. Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in §63.7(c)(3), the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart, using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator' failure to approve or disapprove a plan in a timely manner shall—

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) *Conduct of performance evaluation and performance evaluation dates*. The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under §63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under §63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under §63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under §63.7(h), the owner or operator of an affected source shall conduct the

performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in §63.7(a), or as otherwise specified in the relevant standard.

(5) *Reporting performance evaluation results*.

(i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under §63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The Administrator may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under §63.7 is conducted.

(f) *Use of an alternative monitoring method—*

(1) *General.* Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in §63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4) (i) *Request to use alternative monitoring procedure.* An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement.

If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under §63.7(f).

(ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in §63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.

(5) *Approval of request to use alternative monitoring procedure.*

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by §63.8(f).

(6) *Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

(i) *Criteria for approval of alternative procedures*. An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in §63.7, or other tests performed following the criteria in §63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) *Petition to use alternative to relative accuracy test*. The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure

for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) *Rescission of approval to use alternative to relative accuracy test*. The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

(g) *Reduction of monitoring data*.

(1) The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5)of this section.

(2) The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of §63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

30. **40 CFR 63.9 Notification requirements.**

(a) *Applicability and general information*.

(1) The applicability of this section is set out in §63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4) (i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) *Initial notifications*.

(1) (i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

(ii) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under §63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, 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 types of hazardous air pollutants emitted; and

(v) A statement of whether the affected source is a major source or an area source.

(3) [Reserved]

(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under §63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i); and

(ii) [Reserved]

(iii) [Reserved]

(iv) [Reserved]

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under §63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and

(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in §63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i).

(c) *Request for extension of compliance*. If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §63.6(i)(4) through §63.6(i)(6).

(d) *Notification that source is subject to special compliance requirements*. An owner or operator of a new source that is subject to special compliance requirements as specified in §63.6(b)(3) and §63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) *Notification of performance test*. The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under §63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) *Notification of opacity and visible emission observations*. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in §63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(g) *Additional notification requirements for sources with continuous monitoring systems*. The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under §63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under §63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under §63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by §63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by §63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by §63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than

10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) *Notification of compliance status*.

(1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2) (i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list—

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in §63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of §63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) *Adjustment to time periods or postmark deadlines for submittal and review of required communications*.

(1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this sectioneach time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) *Change in information already provided*. Any change in the information already provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.

31. **40 CFR 63.10 Record keeping and reporting requirements.**

(a) *Applicability and general information*.

(1) The applicability of this section is set out in §63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(4) (i) Before a State has been delegated the authority to implement and enforce record keeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

(ii) After a State has been delegated the authority to implement and enforce record keeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between

the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in §63.9(i).

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in §63.9(i).

(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60part 61 or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in §63.9(i).

(b) *General record keeping requirements.*

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part 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.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of—

(i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

(ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

(iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3));

(v) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of record keeping, in order to minimize the record keeping burden for conforming events);

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii)of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii)of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks;

(xi) All adjustments and maintenance performed on CMS;

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under §63.8(f)(6); and

(xiv) All documentation supporting initial notifications and notifications of compliance status under §63.9.

(3) *Record keeping requirement for applicability determinations.* If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if

any. The requirements to determine applicability of a standard under §63.1(b)(3) and to record the results of that determination under paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

(c) *Additional record keeping requirements for sources with continuous monitoring systems*. In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of—

(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

(2) [Reserved]

(3) [Reserved]

(4) [Reserved]

(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

(6) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);

(7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

(8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

(9) [Reserved]

(10) The nature and cause of any malfunction (if known);

(11) The corrective action taken or preventive measures adopted;

(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and

(14) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).

(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative record keeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the record keeping requirements of the startup, shutdown, and malfunction plan specified in §63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).

(d) *General reporting requirements*.

(1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).

(2) *Reporting results of performance tests*. Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under §63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h).

(3) *Reporting results of opacity or visible emission observations*. The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the

opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under §63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under §63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.

(4) *Progress reports*. The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(5) (i) *Periodic startup, shutdown, and malfunction reports.* If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see §63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Such a report shall identify any instance where any action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the affected source's startup, shutdown, and malfunction plan, but the source does not exceed any applicable emission limitation in the relevant emission standard. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e)of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) *Immediate startup, shutdown, and malfunction reports.* Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred. Notwithstanding the requirements of the previous

sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in §63.9(i).

(e) *Additional reporting requirements for sources with continuous monitoring systems*—

(1) *General*. When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) *Reporting results of continuous monitoring system performance evaluations*.

(i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under §63.8(e), simultaneously with the results of the performance test required under §63.7, unless otherwise specified in the relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under §63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required under §63.7 is conducted.

(3) *Excess emissions and continuous monitoring system performance report and summary report*.

(i) Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner or operator of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually, except when—

(A) More frequent reporting is specifically required by a relevant standard;

(B) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(C) [Reserved]

(ii) *Request to reduce frequency of excess emissions and continuous monitoring system performance reports*. Notwithstanding the frequency of reporting requirements specified in paragraph (e)(3)(i) of this section, an owner or operator who is required by a relevant standard to submit excess emissions and continuous monitoring system performance (and summary) reports on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;

(B) The owner or operator continues to comply with all record keeping and monitoring requirements specified in this subpart and the relevant standard; and

(C) The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in paragraph (e)(3)(iii) of this section.

(iii) The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with a relevant standard may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the 5-year record keeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or

operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iv) As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii)and (e)(3)(iii) of this section.

(v) *Content and submittal dates for excess emissions and monitoring system performance reports*. All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §63.8(c)(7) and §63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(vi) *Summary report*. As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of this section, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled "Summary Report—Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

(A) The company name and address of the affected source;

(B) An identification of each hazardous air pollutant monitored at the affected source;

(C) The beginning and ending dates of the reporting period;

(D) A brief description of the process units;

(E) The emission and operating parameter limitations specified in the relevant standard(s);

(F) The monitoring equipment manufacturer(s) and model number(s);

(G) The date of the latest CMS certification or audit;

(H) The total operating time of the affected source during the reporting period;

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

(K) A description of any changes in CMS, processes, or controls since the last reporting period;

(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(M) The date of the report.

(vii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.

(viii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

(4) *Reporting continuous opacity monitoring system data produced during a performance test*. The owner or operator of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in paragraph (d)(2) of this section.

(f) *Waiver of record keeping or reporting requirements*.

(1) Until a waiver of a record keeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Record keeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) If an application for a waiver of record keeping or reporting is made, the application shall accompany the request for an extension of compliance under §63.6(i), any required compliance progress report or compliance status report required under this part [such as under §63.6(i) and §63.9(h)] or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of record keeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of record keeping or reporting requirements under this paragraph when he/she—

(i) Approves or denies an extension of compliance; or

(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any record keeping or reporting requirement granted under this paragraph may be conditioned on other record keeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

32. **40 CFR 63.11 Control device requirements.**

(a) *Applicability.* The applicability of this section is set out in §63.1(a)(4).

(b) *Flares*.

(1) Owners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.

(2) Flares shall be steam-assisted, air-assisted, or non-assisted.

(3) Flares shall be operated at all times when emissions may be vented to them.

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

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

(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.

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

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

Where:

V_{max}=Maximum permitted velocity, m/sec.

K_1=Constant, 6.0 volume-percent hydrogen.

K_2=Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2}=The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §63.14).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.

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

$$H_T = K\sum_{i=1}^{n} C_i H_i$$

Where:

H_T=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C.

K=Constant= $1.740\times10^{-7}\left(\frac{1}{ppmv}\right)\left(\frac{\text{g-mole}}{\text{scm}}\right)\left(\frac{\text{MJ}}{\text{kcal}}\right)$

where the standard temperature for (g-mole/scm) is 20°C.

C_i=Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in §63.14).

H_i=Net heat of combustion of sample component i, kcal/g-mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §63.14) if published values are not available or cannot be calculated.

n=Number of sample components.

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

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

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

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

Where:

V_{max}=Maximum permitted velocity, m/sec.
28.8=Constant.
31.7=Constant.
H_T=The net heating value as determined in paragraph (b)(6) of this section.

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

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

Where:

V_{max}=Maximum permitted velocity, m/sec.
8.71=Constant.
0.708=Constant.
H_T=The net heating value as determined in paragraph (b)(6)(ii) of this section.

33. **40 CFR 63.12 State authority and delegations.**

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from—

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

(b) (1) section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.

(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

34. **40 CFR 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.**

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional Offices. EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

(b)All information required to be submitted to the Administrator under 40 CFR Part 63 also shall be submitted to the Toledo Division of Environmental Services, 348 S. Erie St., Toledo, Ohio 43602, to which authority has been delegated under section 112(l) of the Clean Air Act as amended in 1990.

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

35. **40 CFR 63.15 Availability of information and confidentiality.**

(a) *Availability of information*.

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) *Confidentiality*.

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

Subpart G—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater

[Note: the permittee is not subject to 40 CFR 63 Subpart G. However, 40 CFR Part 63, subpart G is referenced by 40 CFR Part 63, Subpart CC]

36. **40 CFR 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 sectionshall 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.

37. **40 CFR 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 partand 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 (ñ 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 sectionor 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 sectionor during inspections necessary to determine compliance with paragraphs (b)(5) and (b)(6) of this sectiona 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 subpartis 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 subpartthe 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 subpartthe 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 subpartshall 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.

38. **40 CFR 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 sectionwill 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.

Subpart H—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

[Note: the permittee is not subject to 40 CFR 63 Subpart H. However, 40 CFR Part 63, subpart H is referenced by 40 CFR Part 63, Subpart CC]

39. **40 CFR 63.160 Applicability and designation of source.**

(a) The provisions of this subpart apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required by this subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR part 63 that references this subpart.

(b) After the compliance date for a process unit, equipment to which this subpart applies that are also subject to the provisions of:

(1) 40 CFR part 60 will be required to comply only with the provisions of this subpart.

(2) 40 CFR part 61 will be required to comply only with the provisions of this subpart.

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

(1) 40 CFR part 60, subpart VV, GGG, or KKK; (2) 40 CFR part 61, subpart F or J; or (3) 40 CFR part 264, subpart BB or 40 CFR part 265, subpart BB.

(2) [Reserved]

(d) The provisions in §63.1(a)(3) of subpart A of this part do not alter the provisions in paragraph (b) of this section.

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

(f) The provisions of this subpart do not apply to research and development facilities or to bench-scale batch processes, regardless of whether the facilities or processes are located at the same plant site as a process subject to the provisions of this subpart.

(g) *Alternative means of compliance*.

(1) *Option to comply with part 65.* Owners or operators of CMPU that are subject to §63.100 may choose to comply with the provisions of 40 CFR part 65 for all Group 1 and Group 2 process vents, Group 1 storage vessels, Group 1 transfer operations, and equipment that are subject to §63.100, that are part of the CMPU.

Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(i) For equipment, 40 CFR part 65satisfies the requirements of §§63.102, 63.103, and 63.162 through 63.182. When choosing to comply with 40 CFR part 65, the requirements of §63.180(d) continue to apply.

(ii) For Group 1 and Group 2 process vents, Group 1 storage vessels, and Group 1 transfer operations, comply with §63.110(i)(1).

(2) *Part 65, subpart C or F.* For owners or operators choosing to comply with 40 CFR part 65, each surge control vessel and bottoms receiver subject to §63.100 that meets the conditions specified in table 2 or table 3 of this subpart shall meet the requirements for storage vessels in 40 CFR part 65, subpart C; all other equipment subject to §63.100 shall meet the requirements in 40 CFR part 65, subpart F.

(3) *Part 63, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C or F, for equipment subject to §63.100 must also comply with the applicable general provisions of this part 63 listed in table 4 of this subpart. All sections and paragraphs of subpart A of this part that are not mentioned in table 4 of this subpart do not apply to owners or operators of equipment subject to §63.100 of subpart F complying with 40 CFR part 65, subpart C or F, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C or F, must comply with 40 CFR part 65, subpart A.

40. **40 CFR 63.162 Standards: General.**

(a) Compliance with this subpart will be determined by review of the records required by §63.181 of this subpart and the reports required by §63.182 of this subpart, review of performance test results, and by inspections.

(b) (1) An owner or operator may request a determination of alternative means of emission limitation to the requirements of §§63.163 through 63.170, and §§63.172 through 63.174 of this subpart as provided in §63.177.

(2) If the Administrator makes a determination that a means of emission limitation is a permissible alternative to the requirements of §§63.163 through 63.170, and §§63.172 through 63.174 of this subpart, the owner or operator shall comply with the alternative.

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

(d) Equipment that is in vacuum service is excluded from the requirements of this subpart.

(e) Equipment that is in organic HAP service less than 300 hours per calendar year is excluded from the requirements of §§63.163 through 63.174 of this subpart and §63.178 of this subpart if it is identified as required in §63.181(j) of this subpart.

(f) When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, the following requirements apply:

(1) Clearly identify the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored as specified in §§63.168(f)(3), and 63.175(e)(7)(i)(D) of this subpart, and no leak has been detected during the follow-up monitoring. If the owner or operator elects to comply using the provisions of §63.174(c)(1)(i) of this subpart, the identification on a connector may be removed after it is monitored as specified in §63.174(c)(1)(i) and no leak is detected during that monitoring.

(3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of §63.174(c)(1)(i), may be removed after it is repaired.

(g) Except as provided in paragraph (g)(1) of this section, all terms in this subpart that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annual), refer to the standard calendar periods unless specified otherwise in the section or subsection that imposes the requirement.

(1) If the initial compliance date does not coincide with the beginning of the standard calendar period, an owner or operator may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of paragraphs (g)(2) or (g)(3) of this section.

(2) Time periods specified in this subpart for completion of required tasks may be changed by mutual agreement between the owner or operator and the Administrator, as specified in subpart A of this part. For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

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

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

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

(4) In all instances where a provision of this subpart requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during each period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

(h) In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of this subpart to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of this subpart. However, if the repairs are unsuccessful, a leak is detected and the owner or operator shall take further action as required by applicable provisions of this subpart.

41. **40 CFR 63.163 Standards: Pumps in light liquid service.**

(a) The provisions of this section apply to each pump that is in light liquid service.

(1) The provisions are to be implemented on the dates specified in the specific subpart in 40 CFR part 63 that references this subpart in the phases specified below:

(i) For each group of existing process units at existing sources subject to the provisions of subparts F or I of this part, the phases of the standard are:

(A) Phase I, beginning on the compliance date;

(B) Phase II, beginning no later than 1 year after the compliance date; and

(C) Phase III, beginning no later than 2 ½years after the compliance date.

(ii) For new sources subject to the provisions of subparts F or I of this part, the applicable phases of the standard are:

(A) After initial start-up, comply with the Phase II requirements; and

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

(2) The owner or operator of a source subject to the provisions of subparts For I of this part may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(3) Sources subject to other subparts in 40 CFR part 63 that reference this subpart shall comply on the dates specified in the applicable subpart.

(b) (1) The owner or operator of a process unit subject to this subpart shall monitor each pump monthly to detect leaks by the method specified in §63.180(b) of this subpart and shall comply with the requirements of paragraphs (a) through (d) of this section, except as provided in §63.162(b) of this subpart and paragraphs (e) through (j) of this section.

(2) The instrument reading, as determined by the method as specified in §63.180(b) of this subpart, that defines a leak in each phase of the standard is:

(i) For Phase I, an instrument reading of 10,000 parts per million or greater.
(ii) For Phase II, an instrument reading of 5,000 parts per million or greater.
(iii) For Phase III, an instrument reading of:
(A) 5,000 parts per million or greater for pumps handling polymerizing monomers;
(B) 2,000 parts per million or greater for pumps in food/medical service; and
(C) 1,000 parts per million or greater for all other pumps.

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

(c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (c)(3) of this section or §63.171 of this subpart.

(2) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:
(i) Tightening of packing gland nuts.
(ii) Ensuring that the seal flush is operating at design pressure and temperature.

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

(d) (1) The owner or operator shall decide no later than the first monitoring period whether to calculate percent leaking pumps on a process unit basis or on a source-wide basis. Once the owner or operator has decided, all subsequent percent calculations shall be made on the same basis.

(2) If, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the owner or operator shall implement a quality improvement program for pumps that complies with the requirements of §63.176 of this subpart.

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

(4) Percent leaking pumps shall be determined by the following equation:

$$\%P_L=((P_L-P_S)/(P_T-P_S))\times 100$$

where:

$\%P_L$=Percent leaking pumps
P_L=Number of pumps found leaking as determined through monthly monitoring as required in paragraphs (b)(1) and (b)(2) of this section.
P_T=Total pumps in organic HAP service, including those meeting the criteria in paragraphs (e) and (f) of this section.
P_S=Number of pumps leaking within 1 month of start-up during the current monitoring period.

(e) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraphs (a) through (d) of this section, provided the following requirements are met:

(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) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of §63.172 of this subpart; or
(iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream.

(2) The barrier fluid is not in light liquid service.

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

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

(i) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in §63.180(b) of this subpart to determine if there is a leak of organic HAP in the barrier fluid.

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

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

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

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

(iii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.171 of this subpart.

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

(f) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of paragraphs (a) through (c) of this section.

(g) Any pump equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §63.172 of this subpart is exempt from the requirements of paragraphs (b) through (e) of this section.

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

(i) If more than 90 percent of the pumps at a process unit meet the criteria in either paragraph (e) or (f) of this section, the process unit is exempt from the requirements of paragraph (d) of this section.

(j) Any pump that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor pump is exempt from the requirements of paragraphs (b) through (e) of this section if:

(1) The owner or operator of the pump determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

42. **40 CFR 63.164 Standards: Compressors.**

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in §63.162(b) of this subpartand paragraphs (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) of this sectionshall be:

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

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of §63.172 of this subpart; or

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

(c) The barrier fluid shall not be in light liquid service.

(d) Each barrier fluid system as described in paragraphs (a) through (c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e) (1) Each sensor as required in paragraph (d) of this section shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.

(2) The owner or operator 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) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.

(g) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.171 of this subpart.

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

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

(i) Any compressor that is designated, as described in §63.181(b)(2)(ii) of this subpart, to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:

(1) Is demonstrated to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in §63.180(c) of this subpart; and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

43. **40 CFR 63.165 Standards: Pressure relief devices in gas/vapor service.**

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

(b) (1) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §63.171 of this subpart.

(2) No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device shall be monitored to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in §63.180(c) of this subpart.

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in §63.172 of this subpart is exempt from the requirements of paragraphs (a) and (b) of this section.

(d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §63.171 of this subpart.

44. **40 CFR 63.166 Standards: Sampling connection systems.**

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §63.162(b) of this subpart. Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall:

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

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

(3) Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of §63.172 of this subpart; or

(4) Collect, store, and transport the purged process fluid to a system or facility identified in paragraph (b)(4)(i), (ii), or (iii) of this section.

(i) A waste management unit as defined in §63.111 of subpart G of this part, if the waste management unit is subject to, and operated in compliance with the provisions of subpart G of this part applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in Table 9 of subpart G of part 63, the waste management unit need not be subject to, and operated in compliance with the requirements of 40 CFR part 63, subpart G applicable to group 1 wastewater streams provided the facility has an NPDES permit or sends the wastewater to an NPDES permitted facility.

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

(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.

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

45. **40 CFR 63.167 Standards: Open-ended valves or lines.**

(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 §63.162(b) of this subpart and paragraphs (d) and (e) of this section.

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

(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) 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.

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

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

46. **40 CFR 63.168 Standards: Valves in gas/vapor service and in light liquid service.**

(a) The provisions of this section apply to valves that are either in gas service or in light liquid service.

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

(i) For each group of existing process units at existing sources subject to the provisions of subpart F or I of this part, the phases of the standard are:

(A) Phase I, beginning on the compliance date;

(B) Phase II, beginning no later than 1 year after the compliance date; and

(C) Phase III, beginning no later than 2 ½years after the compliance date.

(ii) For new sources subject to the provisions of subpart F or I of this part, the applicable phases of the standard are:

(A) After initial start-up, comply with the Phase II requirements; and

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

(iii) Sources subject to other subparts in 40 CFR part 63 that reference this subpart shall comply on the dates specified in the applicable subpart.

(2) The owner or operator of a source subject to this subpart may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(3) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of §63.180(b)(6) of this subpart.

(b) The owner or operator of a source subject to this subpart shall monitor all valves, except as provided in §63.162(b) of this subpart and paragraphs (h) and (i) of this section, at the intervals specified in paragraphs (c) and (d) of this section and shall comply with all other provisions of this section, except as provided in §63.171, §63.177, §63.178, and §63.179 of this subpart.

(1) The valves shall be monitored to detect leaks by the method specified in §63.180(b) of this subpart.

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

(i) For Phase I, an instrument reading of 10,000 parts per million or greater.

(ii) For Phase II, an instrument reading of 500 parts per million or greater.

(iii) For Phase III, an instrument reading of 500 parts per million or greater.

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

(d) In Phase III, the owner or operator shall monitor valves for leaks at the intervals specified below:

(1) At process units with 2 percent or greater leaking valves, calculated according to paragraph (e) of this section, the owner or operator shall either:

(i) Monitor each valve once per month; or

(ii) Within the first year after the onset of Phase III, implement a quality improvement program for valves that complies with the requirements of §63.175(d) or (e) of this subpart and monitor quarterly.

(2) At process units with less than 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in paragraphs (d)(3)and (d)(4) of this section.

(3) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters.

(4) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters.

(e) (1) Percent leaking valves at a process unit shall be determined by the following equation:

$$\%V_L=(V_L/(V_T+V_C))\times 100$$

where:

$\%V_L$=Percent leaking valves as determined through periodic monitoring required in paragraphs (b) through (d) of this section.

V_L=Number of valves found leaking excluding nonrepairables as provided in paragraph (e)(3)(i) of this section.

V_T=Total valves monitored, in a monitoring period excluding valves monitored as required by (f)(3) of this section.

V_C=Optional credit for removed valves=0.67 × net number (i.e., total removed-total added) of valves in organic HAP service removed from process unit after the date set forth in §63.100(k) of subpart F for existing process units, and after the date of initial start-up for new sources. If credits are not taken, then V_C=0.

(2) For use in determining monitoring frequency, as specified in paragraph (d) of this section, the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs.

(3) (i) Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with paragraph (e)(3)(ii) of this section. Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation

in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods.

(ii) If the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves.

(f) (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 §63.171 of this subpart.

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

(3) When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair.

(i) The monitoring shall be conducted as specified in §63.180(b) and (c), as appropriate, to determine whether the valve has resumed leaking.

(ii) Periodic monitoring required by paragraphs (b) through (d) of this section may be used to satisfy the requirements of this paragraph (f)(3), if the timing of the monitoring period coincides with the time specified in this paragraph (f)(3). Alternatively, other monitoring may be performed to satisfy the requirements of this paragraph (f)(3), regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this paragraph (f)(3).

(iii) If a leak is detected by monitoring that is conducted pursuant to paragraph (f)(3) of this section, the owner or operator shall follow the provisions of paragraphs (f)(3)(iii)(A) and (f)(3)(iii)(B) of this section, to determine whether that valve must be counted as a leaking valve for purposes of §63.168(e) of this subpart.

(A) If the owner or operator elected to use periodic monitoring required by paragraphs (b) through (d) of this section to satisfy the requirements of paragraph (f)(3) of this section, then the valve shall be counted as a leaking valve.

(B) If the owner or operator elected to use other monitoring, prior to the periodic monitoring required by paragraphs (b) through (d) of this section, to satisfy the requirements of paragraph (f)(3) of this section, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.

(g) First attempts at repair include, but are not limited to, the following practices where practicable:

(1) Tightening of bonnet bolts,

(2) Replacement of bonnet bolts,

(3) Tightening of packing gland nuts, and

(4) Injection of lubricant into lubricated packing.

(h) Any valve that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor valve is exempt from the requirements of paragraphs (b) through (f) of this section if:

(1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of this section; and

(2) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

(i) Any valve that is designated, as described in §63.181(b)(7)(ii) of this subpart, as a difficult-to-monitor valve is exempt from the requirements of paragraphs (b) through (d) of this section if:

(1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner;

(2) The process unit within which the valve is located is an existing source or the owner or operator designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

(j) Any equipment located at a plant site with fewer than 250 valves in organic HAP service is exempt from the requirements for monthly monitoring and a quality improvement program specified in paragraph (d)(1) of this section. Instead, the owner or operator shall monitor each valve in organic HAP service for leaks once each quarter, or comply with paragraphs (d)(3) or (d)(4) of this section except as provided in paragraphs (h) and (i) of this section.

47. **40 CFR 63.169 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service.**

(a) Pumps, valves, connectors, and agitators in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems shall be monitored within 5 calendar days by the method specified in §63.180(b) of this subpart if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in paragraphs (c) and (d) of this section, it is not necessary to monitor the system for leaks by the method specified in §63.180(b) of this subpart.

(b) If an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million or greater for all other pumps (including pumps in food/medical service), or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected.

(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 §63.171 of this subpart.

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

(3) For equipment identified in paragraph (a) of this section that is not monitored by the method specified in §63.180(b), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

(d) First attempts at repair include, but are not limited to, the practices described under §§63.163(c)(2) and 63.168(g) of this subpart, for pumps and valves, respectively.

48. **40 CFR 63.170 Standards: Surge control vessels and bottoms receivers.**

Each surge control vessel or bottoms receiver that is not routed back to the process and that meets the conditions specified in table 2 or table 3 of this subpart shall be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in §63.172 of this subpart, except as provided in §63.162(b) of this subpart, or comply with the requirements of §63.119(b) or (c) of subpart G of this part.

49. **40 CFR 63.171 Standards: Delay of repair.**

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

(b) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.

(c) Delay of repair for valves, connectors, and agitators is also allowed if:

(1) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §63.172 of this subpart.

(d) Delay of repair for pumps is also allowed if:

(1) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of §63.176(d) of this subpartwill provide better performance or:

(i) A dual mechanical seal system that meets the requirements of §63.163(e) of this subpart,
(ii) A pump that meets the requirements of §63.163(f) of this subpart, or
(iii) A closed-vent system and control device that meets the requirements of §63.163(g) of this subpart; and
(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
(e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

50. **40 CFR 63.172 Standards: Closed-vent systems and control devices.**

(a) Owners or operators of closed-vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section, except as provided in §63.162(b) of this subpart.
(b) Recovery or recapture devices (e.g., condensers and absorbers) shall be designed and operated to recover the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts par million by volume, whichever is less stringent. The 20 parts per million by volume performance standard is not applicable to the provisions of §63.179.
(c) Enclosed combustion devices shall be designed and operated to reduce the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760°C.
(d) Flares used to comply with this subpart shall comply with the requirements of §63.11(b) of subpart A of this part.
(e) Owners or operators of control devices that are 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 design. **Note**: The intent of this provision is to ensure proper operation and maintenance of the control device.
(f) Except as provided in paragraphs (k) and (l) of this section, each closed-vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.
(1) If the closed-vent system is constructed of hard-piping, the owner or operator shall:
(i) Conduct an initial inspection according to the procedures in paragraph (g) of this section, and
(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
(2) If the vapor collection system or closed-vent system is constructed of duct work, the owner or operator shall:
(i) Conduct an initial inspection according to the procedures in paragraph (g) of this section, and
(ii) Conduct annual inspections according to the procedures in paragraph (g) of this section.
(g) Each closed-vent system shall be inspected according to the procedures in §63.180(b) of this subpart.
(h) Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in paragraph (i) of this section.
(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
(2) Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in paragraph (i) of this section.
(i) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator 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.

(j) For each closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the owner or operator shall comply with the provisions of either paragraph (j)(1) or (j)(2) of this section, except as provided in paragraph (j)(3) of this section.

(1) Install, set or adjust, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in §63.118(a)(3) of subpart G of this part. The flow indicator shall be installed at the entrance to any bypass line; or

(2) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

(3) Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph.

(k) Any parts of the closed-vent system that are designated, as described in paragraph 63.181(b)(7)(i), as unsafe to inspect are exempt from the inspection re quirements of paragraphs (f)(1) and (f)(2) of this section if:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually.

(l) Any parts of the closed-vent system that are designated, as described in §63.181(b)(7)(i) of this subpart, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1) and (f)(2) of this section if:

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

(2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years.

(m) Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of this subpart, such system or control device shall be operating.

(n) After the compliance dates specified in §63.100 of subpart F of this part, the owner or operator of any control device subject to this subpart that is also subject to monitoring, record keeping, and reporting requirements in 40 CFR part 264, subpart BB, or is subject to monitoring and record keeping requirements in 40 CFR part 265, subpart BB, may elect to comply either with the monitoring, record keeping, and reporting requirements of this subpart, or with the monitoring, record keeping, and reporting requirements in 40 CFR parts 264 and/or 265, as described in this paragraph, which shall constitute compliance with the monitoring, record keeping and reporting requirements of this subpart. The owner or operator shall identify which option has been chosen, in the next periodic report required by §63.182(d).

51. **40 CFR 63.173 Standards: Agitators in gas/vapor service and in light liquid service.**

(a) (1) Each agitator shall be monitored monthly to detect leaks by the methods specified in §63.180(b) of this subpart, except as provided in §63.162(b) of this subpart.

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

(b) (1) Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator.

(2) If there are indications of liquids dripping from the agitator, a leak is detected.

(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 §63.171 of this subpart.

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

(d) Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in paragraphs (d)(1) through (d)(6) of this section are met:

(1) Each dual mechanical seal system is:

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

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of §63.172 of this subpart; or

(iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream.

(2) The barrier fluid is not in light liquid organic HAP service.

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

(4) Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal.

(i) If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in §63.180(b) of this subpart to determine the presence of organic HAP in the barrier fluid.

(ii) If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.

(5) Each sensor as described in paragraph (d)(3) of this section is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site.

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

(ii) If indications of liquids dripping from the agitator seal exceed the criteria established in paragraph (d)(6)(i) of this section, or if, based on the criteria established in paragraph (d)(6)(i) of this section, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

(iii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.171 of this subpart.

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

(e) Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from paragraphs (a) through (c) of this section.

(f) Any agitator equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of §63.172 of this subpart is exempt from the requirements of paragraphs (a) through (c) of the section.

(g) Any agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (b)(1) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each agitator is visually inspected as often as practical and at least monthly.

(h) Any agitator that is difficult-to-monitor is exempt from the requirements of paragraphs (a) through (d) of this section if:

(1) The owner or operator determines that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner;

(2) The process unit within which the agitator is located is an existing source or the owner or operator designates less than three percent of the total number of agitators in a new source as difficult-to-monitor; and

(3) The owner or operator follows a written plan that requires monitoring of the agitator at least once per calendar year.

(i) Any agitator that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of paragraphs (a) through (d) of this section.

(j) Any agitator that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor agitator is exempt from the requirements of paragraphs (a) through (d) of this section if:

(1) The owner or operator of the agitator determines that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (a) through (d) of this section; and

(2) The owner or operator of the agitator has a written plan that requires monitoring of the agitator as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

52. **40 CFR 63.174 Standards: Connectors in gas/vapor service and in light liquid service.**

(a) The owner or operator of a process unit subject to this subpart shall monitor all connectors in gas/vapor and light liquid service, except as provided in §63.162(b) of this subpart, and in paragraphs (f) through (h) of this section, at the intervals specified in paragraph (b) of this section.

(1) The connectors shall be monitored to detect leaks by the method specified in §63.180(b) of this subpart.

(2) If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.

(b) The owner or operator shall monitor for leaks at the intervals specified in either paragraph (b)(1) or (b)(2) of this section and in paragraph (b)(3) of this section.

(1) For each group of existing process units within an existing source, by no later than 12 months after the compliance date, the owner or operator shall monitor all connectors, except as provided in paragraphs (f) through (h) of this section.

(2) For new sources, within the first 12 months after initial start-up or by no later than 12 months after the date of promulgation of a specific subpart that references this subpart, whichever is later, the owner or operator shall monitor all connectors, except as provided in paragraphs (f) through (h) of this section.

(3) After conducting the initial survey required in paragraph (b)(1) or (b)(2) of this section, the owner or operator shall perform all subsequent monitoring of connectors at the frequencies specified in paragraphs (b)(3)(i) through (b)(3)(v) of this section, except as provided in paragraph (c)(2) of this section:

(i) Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period.

(ii) Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. An owner or operator may comply with this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period.

(iii) If the owner or operator of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the owner or operator may monitor the connectors one time every 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years.

(iv) If a process unit complying with the requirements of paragraph (b) of this section using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the owner or operator shall increase the monitoring frequency to one time every 2 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The owner or operator may again elect to use the provisions of paragraph (b)(3)(iii) of this section when the percent leaking connectors decreases to less than 0.5 percent.

(v) If a process unit complying with requirements of paragraph (b)(3)(iii) of this section using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the owner or operator shall increase the monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of paragraph (b)(3)(iii) of this section when the percent leaking connectors decreases to less than 0.5 percent.

(4) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of §63.180(b)(6).

(c) (1) (i) Except as provided in paragraph (c)(1)(ii) of this section, each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic hazardous air pollutants service. If the monitoring detects a leak, it shall be repaired according to the provisions of paragraph (d) of this section, unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of paragraph (i)(2) of this section.

(ii) As an alternative to the requirements in paragraph (c)(1)(i) of this section, an owner or operator may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the owner or operator may not count nonrepairable connectors for the purposes of paragraph (i)(2) of this section. The owner or operator shall calculate the percent leaking connectors for the monitoring periods described in paragraph (b) of this section, by setting the nonrepairable component, $C_{AN,}$ in the equation in paragraph (i)(2) of this section to zero for all monitoring periods.

(iii) An owner or operator may switch alternatives described in paragraphs (c)(1)(i) and (ii) of this section at the end of the current monitoring period he is in, provided that it is reported as required in §63.182 of this subpart and begin the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch.

(2) As an alternative to the requirements of paragraph (b)(3) of this section, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the dates specified in paragraph (c)(2)(iii) or (c)(2)(iv) of this section may:

(i) Comply with the requirements of §63.169 of this subpart, and

(ii) Be monitored for leaks within the first 3 months after being returned to organic hazardous air pollutants service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of paragraph (d) of this section.

(iii) For sources subject to subparts F and I of this part, the provisions of paragraph (c)(2) of this section apply to screwed connectors installed before December 31, 1992.

(iv) For sources not identified in paragraph (c)(2)(iii) of this section, the provisions of paragraph (c)(2) of this section apply to screwed connectors installed before the date of proposal of the applicable subpart of this part that references this subpart.

(d) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in paragraph (g) of this section and in §63.171 of this subpart. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(e) [Reserved]

(f) Any connector that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor connector is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with paragraphs (a) through (e) of this section; and

(2) The owner or operator has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable.

(g) Any connector that is designated, as described in §63.181(b)(7)(iii) of this subpart, as an unsafe-to-repair connector is exempt from the requirements of paragraphs (a), (d), and (e) of this section if:

(1) The owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (d) of this section; and

(2) The connector will be repaired before the end of the next scheduled process unit shutdown.

(h) (1) Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of paragraphs (a) and (c) of this sectionand from the record keeping and reporting requirements of §63.181 and §63.182 of this subpart.

(i) Buried;

(ii) Insulated in a manner that prevents access to the connector by a monitor probe;

(iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;

(iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground;

(v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or

(vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

(2) If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §63.171 of this subpart and paragraph (g) of this section.

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

(i) For use in determining the monitoring frequency, as specified in paragraph (b) of this section, the percent leaking connectors shall be calculated as specified in paragraphs (i)(1) and (i)(2) of this section.

(1) For the first monitoring period, use the following equation:

$$\% C_L = C_L/(C_t + C_C) \times 100$$

where:

$\% C_L$= Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of this section.
C_L= Number of connectors measured at 500 parts per million or greater, by the method specified in §63.180(b) of this subpart.
C_t= Total number of monitored connectors in the process unit.
C_C= Optional credit for removed connectors = 0.67 × net (i.e., total removed—total added) number of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then C_C= 0.

(2) For subsequent monitoring periods, use the following equation:

$$\% C_L = [(C_L - C_{AN})/(C_t + C_C)] \times 100$$

where:

$\% C_L$= Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of this section.
C_L= Number of connectors, including nonrepairables, measured at 500 parts per million or greater, by the method specified in §63.180(b) of this subpart.
C_{AN}= Number of allowable nonrepairable connectors, as determined by monitoring required in paragraphs (b)(3) and (c) of this section, not to exceed 2 percent of the total connector population, C_t.
C_t= Total number of monitored connectors, including nonrepairables, in the process unit.
C_C= Optional credit for removed connectors = 0.67 × net number (i.e., total removed—total added) of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then C_C= 0.

(j) Optional credit for removed connectors. If an owner or operator eliminates a connector subject to monitoring under paragraph (b) of this section, the owner or operator may receive credit for elimination of the

connector, as described in paragraph (i) of this section, provided the requirements in paragraphs (j)(1) through (j)(4)are met.

(1) The connector was welded after the date of proposal of the specific subpart that references this subpart.

(2) The integrity of the weld is demonstrated by monitoring it according to the procedures in §63.180(b) of this subpart or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method.

(3) Welds created after the date of proposal but before the date of promulgation of a specific subpart that references this subpart are monitored or tested by 3 months after the compliance date specified in the applicable subpart.

(4) Welds created after promulgation of the subpart that references this subpart are monitored or tested within 3 months after being welded.

(5) If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is therefore not exempt from the provisions of this subpart.

53. **40 CFR 63.175 Quality improvement program for valves.**

(a) In Phase III, an owner or operator may elect to comply with one of the alternative quality improvement programs specified in paragraphs (d) and (e) of this section. The decision to use one of these alternative provisions to comply with the requirements of §63.168(d)(1)(ii) of this subpart must be made during the first year of Phase III for existing process units and for new process units.

(b) An owner or operator of a process unit subject to the requirements of paragraphs (d) or (e) of this section shall comply with those requirements until the process unit has fewer than 2 percent leaking valves, calculated as a rolling average of 2 consecutive quarters, as specified in §63.168(e) of this subpart.

(c) After the process unit has fewer than 2 percent leaking valves, the owner or operator may elect to comply with the requirements in §63.168 of this subpart, to continue to comply with the requirements in paragraph (e) [or (d), if appropriate] of this section, or comply with both the requirements in §63.168 and §63.175.

(1) If the owner or operator elects to continue the quality improvement program, the owner or operator is exempt from the requirements for performance trials as specified in paragraph (e)(6) of this section, or further progress as specified in paragraph (d)(4) of this section, as long as the process unit has fewer than 2 percent leaking valves calculated according to §63.168(e).

(2) If the owner or operator elects to comply with both paragraph (e) of this section and §63.168 of this subpart, he may also take advantage of the lower monitoring frequencies associated with lower leak rates in §63.168(d)(2), (d)(3), and (d)(4) of this subpart.

(3) If the owner or operator elects not to continue the quality improvement program, the program is no longer an option if the process unit again exceeds 2 percent leaking valves, and in such case, monthly monitoring will be required.

(d) The following requirements shall be met if an owner or operator elects to use a quality improvement program to demonstrate further progress:

(1) The owner or operator shall continue to comply with the requirements in §63.168 of this subpart except each valve shall be monitored quarterly.

(2) The owner or operator shall collect the following data, and maintain records as required in §63.181(h)(1) of this subpart, for each valve in each process unit subject to the quality improvement program:

(i) The maximum instrument reading observed in each monitoring observation before repair, the response factor for the stream if appropriate, the instrument model number, and date of the observation.

(ii) Whether the valve is in gas or light liquid service.

(iii) If a leak is detected, the repair methods used and the instrument readings after repair.

(3) The owner or operator shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(4) The owner or operator must demonstrate progress in reducing the percent leaking valves each quarter the process unit is subject to the requirements of paragraph (d) of this section, except as provided in paragraphs (d)(4)(ii) and (d)(4)(iii) of this section.

(i) Demonstration of progress shall mean that for each quarter there is at least a 10-percent reduction in the percent leaking valves from the percent leaking valves determined for the preceding monitoring period. The percent leaking valves shall be calculated as a rolling average of two consecutive quarters of monitoring data. The percent reduction shall be calculated using the rolling average percent leaking valves, according to the following:

$\%LV_R = (\%LV_{AVG1} - \%LV_{AVG2})\%LV_{AVG1} \times 100$

where:

$\%LV_R$Percent leaking valve reduction.
$\%LV_{AVG1}=(\%V_{Li} + \%V_{Li=1})/2$.
$\%LV_{AVG2}=(\%V_{Li+1} + \%V_{Li=2})/2$.
where:
$\%V_{Li}$, $\%V_{Li=1}$, $\%V_{Li=2}$
are percent leaking valves calculated for subsequent monitoring periods, i, i+1, i+2.

(ii) An owner or operator who fails for two consecutive rolling averages to demonstrate at least a 10-percent reduction per quarter in percent leaking valves, and whose overall average percent reduction based on two or more rolling averages is less than 10 percent per quarter, shall either comply with the requirements in §63.168(d)(1)(i) of this subpart using monthly monitoring or shall comply using a quality improvement program for technology review as specified in paragraph (e) of this section. If the owner or operator elects to comply with the requirements of paragraph (e) of this section, the schedule for performance trials and valve replacements remains as specified in paragraph (e) of this section.

(iii) As an alternative to the provisions in paragraph (d)(4)(i), an owner or operator may use the procedure specified in paragraphs (d)(4)(iii)(A) and (d)(4)(iii)(B) of this section to demonstrate progress in reducing the percent leaking valves.

(A) The percent reduction that must be achieved each quarter shall be calculated as follows:

$$\%RR = \frac{\%V_L - 2\%}{0.10}$$

%RR = percent reduction required each quarter, as calculated according to §63.168(e)
$\%V_L$ = percent leaking valves, calculated according to §63.168(e), at the time elected to use provisions of §63.168(d)(1)(ii)

(B) The owner or operator shall achieve less than 2 percent leaking valves no later than 2 years after electing to use the demonstration of progress provisions in §63.175(d) of this subpart.

(e) The following requirements shall be met if an owner or operator elects to use a quality improvement program of technology review and improvement:

(1) The owner or operator shall comply with the requirements in §63.168 of this subpart except the requirement for monthly monitoring in §63.168(d)(1)(i) of this subpart does not apply.

(2) The owner or operator shall collect the data specified below, and maintain records as required in §63.181(h)(2), for each valve in each process unit subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or group of process units basis. The data shall include the following:

(i) Valve type (e.g., ball, gate, check); valve manufacturer; valve design (e.g., external stem or actuating mechanism, flanged body); materials of construction; packing material; and year installed.

(ii) Service characteristics of the stream such as operating pressure, temperature, line diameter, and corrosivity.

(iii) Whether the valve is in gas or light liquid service.

(iv) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if adjusted, instrument model number, and date of the observation.

(v) If a leak is detected, the repair methods used and the instrument readings after repair.

(vi) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(3) The owner or operator shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(4) The owner or operator shall inspect all valves removed from the process unit due to leaks. The inspection shall determine which parts of the valve have failed and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(5) (i) The owner or operator shall analyze the data collected to comply with the requirements of paragraph (e)(2) of this section to determine the services, operating or maintenance practices, and valve designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) The analysis shall also be used to identify any superior performing valve technologies that are applicable to the service(s), operating conditions, or valve designs associated with poorer than average emission performance. A superior performing valve technology is one for which a group of such valves has a leak frequency of less than 2 percent for specific applications in such a process unit. A candidate superior performing valve technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 2 percent leaking valves in the process unit.

(iii) The analysis shall include consideration of:

(A) The data obtained from the inspections of valves removed from the process unit due to leaks,

(B) Information from the available literature and from the experience of other plant sites that will identify valve designs or technologies and operating conditions associated with low emission performance for specific services, and

(C) Information on limitations on the service conditions for the valve design and operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a company, or a group of process units.

(v) The first analysis of the data shall be completed no later than 18 months after the start of Phase III. The first analysis shall be performed using a minimum of two quarters of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify superior performing valve designs or technologies that can be applied to the operating conditions and services identified as having poorer than average performance, except as provided in paragraph (e)(6)(v) of this section. The trial program shall be used to evaluate the feasibility of using in the process unit the valve designs or technologies that have been identified by others as having low emission performance.

(i) The trial program shall include on-line trials of valves or operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 2 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing valve technologies is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in §63.181(h)(5)(ii) of this subpart.

(ii) The number of valves in the trial evaluation program shall be the lesser of 1 percent or 20 valves for programs involving single process units and the lesser of 1 percent or 50 valves for programs involving groups of process units.

(iii) The trial evaluation program shall specify and include documentation of:

(A) The candidate superior performing valve designs or technologies to be evaluated, the stages for evaluating the identified candidate valve designs or technologies, including the estimated time period necessary to test the applicability;

(B) The frequency of monitoring or inspection of the equipment;

(C) The range of operating conditions over which the component will be evaluated; and

(D) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial valves.

(iv) The performance trials shall initially be conducted for, at least, a 6-month period beginning not later than 18 months after the start of Phase III. Not later than 24 months after the start of Phase III, the owner or operator shall have identified valve designs or technologies that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The owner or operator shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (e)(6)(vi) of this section. The compilation of candidate and demonstrated superior emission performance valve designs or technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 total employees shall be exempt from trial evaluations of valves. Plant sites exempt from the trial evaluations of valves shall begin the program at the start of the fourth year of Phase III.

(vi) An owner or operator who has conducted performance trials on all candidate superior emission performance technologies suitable for the required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible candidate superior technologies remaining. The owner or operator shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(7) Each owner or operator who elects to use a quality improvement program for technology review and improvement shall prepare and implement a valve quality assurance program that details purchasing specifications and maintenance procedures for all valves in the process unit. The quality assurance program may establish any number of categories, or classes, of valves as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (e)(5) of this section, if applicable, the findings of the trial evaluation required in paragraph (e)(6) of this section, and the operating conditions in the process unit. The quality assurance program shall be reviewed and, as appropriate, updated each year as long as the process unit has 2 percent or more leaking valves.

(i) The quality assurance program shall:

(A) Establish minimum design standards for each category of valves. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(B) Require that all equipment orders specify the design standard (or minimum tolerances) for the valve;

(C) Include a written procedure for bench testing of valves that specifies performance criteria for acceptance of valves and specifies criteria for the precision and accuracy of the test apparatus. All valves repaired off-line after preparation of the quality assurance plan shall be bench-tested for leaks. This testing may be conducted by the owner or operator of the process unit, by the vendor, or by a designated representative. The

owner or operator shall install only those valves that have been documented through bench-testing to be nonleaking.

(D) Require that all valves repaired on-line be monitored using the method specified in §63.180(b) of this subpartfor leaks for 2 successive months, after repair.

(E) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the owner or operator of the process unit or by a designated representative.

(F) Detail off-line valve maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished valves will meet the design specifications for the valve type and will operate such that emissions are minimized.

(ii) The quality assurance program shall be established no later than the start of the third year of Phase III for plant sites with 400 or more valves or owned by a corporation with 100 or more employees; and no later than the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees.

(8) Beginning at the start of the third year of Phase III for plant sites with 400 or more valves or owned by a corporation with 100 or more employees and at the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees, each valve that is replaced for any reason shall be replaced with a new or modified valve that complies with the quality assurance standards for the valve category and that is identified as superior emission performance technology. Superior emission performance technology means valves or valve technologies identified with emission performance that, combined with appropriate process, operating, and maintenance practices, will result in less than 2 percent leaking valves for specific applications in a large population, except as provided in paragraph (e)(8)(ii) of this section.

(i) The valves shall be maintained as specified in the quality assurance program.

(ii) If a superior emission performance technology cannot be identified, then valve replacement shall be with one of (if several) the lowest emission performance technologies that has been identified for the specific application.

54. **40 CFR 63.176 Quality improvement program for pumps.**

(a) In Phase III, if, on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the owner or operator shall comply with the requirements of this section as specified below:

(1) Pumps that are in food/medical service or in polymerizing monomer service shall comply with all requirements except for those specified in paragraph (d)(8) of this section.

(2) Pumps that are not in food/medical or polymerizing monomer service shall comply with all requirements of this section.

(b) The owner or operator shall comply with the requirements of this section until the number of leaking pumps is less than the greater of either 10 percent of the pumps or three pumps, calculated as a 6-month rolling average, in the process unit (or plant site). Once the performance level is achieved, the owner or operator shall comply with the requirements in §63.163 of this subpart.

(c) If in a subsequent monitoring period, the process unit (or plant site) has greater than 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the owner or operator shall resume the quality improvement program starting at performance trials.

(d) The quality improvement program shall include the following:

(1) The owner or operator shall comply with the requirements in §63.163 of this subpart.

(2) The owner or operator shall collect the following data, and maintain records as required in §63.181(h)(3), for each pump in each process unit (or plant site) subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or plant site basis.

(i) Pump type (e.g., piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (e.g., external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material; and year installed.

(ii) Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours.

(iii) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation.

(iv) If a leak is detected, the repair methods used and the instrument readings after repair.

(v) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(3) The owner or operator shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program.

(4) The owner or operator shall inspect all pumps or pump seals which exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(5) (i) The owner or operator shall analyze the data collected to comply with the requirements of paragraph (d)(2) of this section to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the service(s), operating conditions, or pump or pump seal designs associated with poorer than average emission performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10 percent for specific applications in the process unit or plant site. A candidate superior performing pump or pump seal technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 10 percent leaking pumps in the process unit (or plant site).

(iii) The analysis shall include consideration of:

(A) The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks;

(B) Information from the available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emission performance for specific services; and

(C) Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a plant site, a company, or a group of process units.

(v) The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using a minimum of 6 months of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance, except as provided in paragraph (d)(6)(v) of this section. The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or

seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.

(i) The trial program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 10 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in §63.181(h)(5)(ii).

(ii) The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1 percent or two pumps for programs involving single process units and the lesser of 1 percent or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one.

(iii) The trial evaluation program shall specify and include documentation of:

(A) The candidate superior performing pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability;

(B) The frequency of monitoring or inspection of the equipment;

(C) The range of operating conditions over which the component will be evaluated; and

(D) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps.

(iv) The performance trials shall initially be conducted, at least, for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the owner or operator shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The owner or operator shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (d)(6)(vi) of this section. The initial list of superior emission performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program.

(vi) An owner or operator who has conducted performance trials on all alternative superior emission performance technologies suitable for the required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible alternative superior technologies remaining. The owner or operator shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(7) Each owner or operator shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (d)(5) of this section, if applicable, the findings of the trial evaluation required in paragraph (d)(6) of this section, and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10 percent or more leaking pumps or has three leaking pumps.

(i) The quality assurance program shall:

(A) Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(B) Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal;

(C) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the owner or operator of the plant site or process unit or by a designated representative; and

(D) Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate such that emissions are minimized.

(ii) The quality assurance program shall be established no later than the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees; and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees.

(8) Beginning at the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the owner or operator shall replace, as described in paragraphs (d)(8)(i) and (d)(8)(ii) of this section, the pumps or pump seals that are not superior emission performance technology with pumps or pump seals that have been identified as superior emission performance technology and that comply with the quality assurance standards for the pump category. Superior emission performance technology is that category or design of pumps or pump seals with emission performance which, when combined with appropriate process, operating, and maintenance practices, will result in less than 10 percent leaking pumps for specific applications in the process unit or plant site. Superior emission performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement.

(i) Pumps or pump seals shall be replaced at the rate of 20 percent per year based on the total number of pumps in light liquid service. The calculated value shall be rounded to the nearest nonzero integer value. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of §63.163 of this subpartare pumps determined to be superior performance technology.

(ii) The owner or operator may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown, provided the number of pump seals and pumps replaced is equivalent to the 20 percent or greater annual replacement rate.

(iii) The pumps shall be maintained as specified in the quality assurance program.

55. **40 CFR 63.177 Alternative means of emission limitation: General.**

(a) Permission to use an alternative means of emission limitation under section 112(h)(3) of the Act shall be governed by the following procedures in paragraphs (b) through (e) of this section.

(b) Where the standard is an equipment, design, or operational requirement:

(1) Each owner or operator applying for permission to use an alternative means of emission limitation under §63.6(g) of subpart A of this part shall be responsible for collecting and verifying emission performance test data for an alternative means of emission limitation.

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

(3) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Where the standard is a work practice:

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

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

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

(4) Each owner or operator applying for permission shall commit, in writing, for each kind of equipment to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices.

(5) The Administrator will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4) of this section.

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

(d) An owner or operator may offer a unique approach to demonstrate the alternative means of emission limitation.

(e) (1) Manufacturers of equipment used to control equipment leaks of an organic HAP may apply to the Administrator for permission for an alternative means of emission limitation that achieves a reduction in emissions of the organic HAP achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will grant permission according to the provisions of paragraphs (b), (c), and (d) of this section.

56. **40 CFR 63.178 Alternative means of emission limitation: Batch processes.**

(a) As an alternative to complying with the requirements of §§63.163 through 63.171 and §§63.173 through 63.176, an owner or operator of a batch process that operates in organic HAP service during the calendar year may comply with one of the standards specified in paragraphs (b) and (c) of this section, or the owner or operator may petition for approval of an alternative standard under the provisions of §63.177 of this subpart. The alternative standards of this section provide the options of pressure testing or monitoring the equipment for leaks. The owner or operator may switch among the alternatives provided the change is documented as specified in §63.181.

(b) The following requirements shall be met if an owner or operator elects to use pressure testing of batch product-process equipment to demonstrate compliance with this subpart. An owner or operator who complies with the provisions of this paragraph is exempt from the monitoring provisions of §63.163, §§63.168 and 63.169, and §§63.173 through 63.176 of this subpart.

(1) Each time equipment is reconfigured for production of a different product or intermediate, the batch product-process equipment train shall be pressure-tested for leaks before organic HAP is first fed to the equipment and the equipment is placed in organic HAP service.

(i) When the batch product-process train is reconfigured to produce a different product, pressure testing is required only for the new or disturbed equipment.

(ii) Each batch product process that operates in organic HAP service during a calendar year shall be pressure tested at least once during that calendar year.

(iii) Pressure testing is not required for routine seal breaks, such as changing hoses or filters, which are not part of the reconfiguration to produce a different product or intermediate.

(2) The batch product process equipment shall be tested either using the procedures specified in §63.180(f) of this subpart for pressure or vacuum loss or with a liquid using the procedures specified in §63.180(g) of this subpart.

(3) (i) For pressure or vacuum tests, a leak is detected if the rate of change in pressure is greater than 6.9 kilopascals (1 psig) in 1 hour or if there is visible, audible, or olfactory evidence of fluid loss.

(ii) For pressure tests using a liquid, a leak is detected if there are indications of liquids dripping or if there is other evidence of fluid loss.

(4) (i) If a leak is detected, it shall be repaired and the batch product-process equipment shall be retested before start-up of the process.

(ii) If a batch product-process fails the retest or the second of two consecutive pressure tests, it shall be repaired as soon as practicable, but not later than 30 calendar days after the second pressure test, provided the conditions specified in paragraph (d) of this section are met.

(c) The following requirements shall be met if an owner or operator elects to monitor the equipment to detect leaks by the method specified in §63.180(b) of this subpart to demonstrate compliance with this subpart.

(1) The owner or operator shall comply with the requirements of §§63.163 through 63.170, and §§63.172 through 63.176 of this subpart.

(2) The equipment shall be monitored for leaks by the method specified in §63.180(b) of this subpart when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(3) The equipment shall be monitored for leaks as specified below:

(i) Each time the equipment is reconfigured for the production of a new product, the reconfigured equipment shall be monitored for leaks within 30 days of start-up of the process. This initial monitoring of reconfigured equipment shall not be included in determining percent leaking equipment in the process unit.

(ii) Connectors shall be monitored in accordance with the requirements in §63.174 of this subpart.

(iii) Equipment other than connectors shall be monitored at the frequencies specified in table 1 of this subpart. The operating time shall be determined as the proportion of the year the batch product-process that is subject to the provisions of this subpart is operating.

(iv) The monitoring frequencies specified in table 1 of this subpart are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. An owner or operator may monitor anytime during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. For example, if the equipment is not operating during the scheduled monitoring period, the monitoring can be done during the next period when the process is operating.

(4) If a leak is detected, it shall be repaired as soon as practicable but not later than 15 calendar days after it is detected, except as provided in paragraph (d) of this section.

(d) Delay of repair of equipment for which leaks have been detected is allowed if the replacement equipment is not available providing the following conditions are met:

(1) Equipment supplies have been depleted and supplies had been sufficiently stocked before the supplies were depleted.

(2) The repair is made no later than 10 calendar days after delivery of the replacement equipment.

57. **40 CFR 63.179 Alternative means of emission limitation: Enclosed-vented process units.**

Process units enclosed in such a manner that all emissions from equipment leaks are vented through a closed-vent system to a control device meeting the requirements of §63.172 of this subpart are exempt from the requirements of §63.163 through 63.171, and §§63.173 and 63.174 of this subpart. The enclosure shall be maintained under a negative pressure at all times while the process unit is in operation to ensure that all emissions are routed to a control device.

58. **40 CFR 63.180 Test methods and procedures.**

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) Monitoring, as required under this subpart, shall comply with the following requirements:

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

(2) (i) Except as provided for in paragraph (b)(2)(ii) of this section, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAP's or VOC's, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.

(ii) If no instrument is available at the plant site that will meet the performance criteria specified in paragraph (b)(2)(i) of this section, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in paragraph (b)(2)(i) of this section.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(4) Calibration gases shall be:

(i) Zero air (less than 10 parts per million of hydrocarbon in air); and

(ii) Mixtures of methane in air at the concentrations specified in paragraphs (b)(4)(ii)(A) through (b)(4)(ii)(C) of this section. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (b)(2)(i) of this section. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(A) For Phase I, a mixture of methane or other compounds, as applicable, in air at a concentration of approximately, but less than, 10,000 parts per million.

(B) For Phase II, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million for agitators, 5,000 parts per million for pumps, and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of this section.

(C) For Phase III, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million methane for agitators; 2,000 parts per million for pumps in food/medical service; 5,000 parts per million for pumps in polymerizing monomer service; 1,000 parts per million for all other pumps; and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of this section.

(iii) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.

(5) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(6) Monitoring data that do not meet the criteria specified in paragraphs (b)(1) through (b)(5) of this section may be used to qualify for less frequent monitoring under the provisions in §63.168(d)(2) and (d)(3) or §63.174(b)(3)(ii) or (b)(3)(iii) of this subpart provided the data meet the conditions specified in paragraphs (b)(6)(i) and (b)(6)(ii) of this section.

(i) The data were obtained before April 22, 1994.

(ii) The departures from the criteria specified in paragraphs (b)(1) through (b)(5) of this section or from the specified monitoring frequency of §63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks

instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of paragraph (b)(2) of this section, or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

(c) When equipment is monitored for compliance as required in §§63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by this subpart, the owner or operator may elect to adjust or not to adjust the instrument readings for background. If an owner or operator elects to not adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in paragraphs (b)(1) through (b)(4) of this section. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If an owner or operator elects to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in paragraphs (c)(1) through (c)(4) of this section.

(1) The requirements of paragraphs (b)(1) through (4) of this section shall apply.

(2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.

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

(d) (1) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless an owner or operator demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used.

(2) (i) An owner or operator may use good engineering judgment rather than the procedures in paragraph (d)(1) of this section to determine that the percent organic HAP content does not exceed 5 percent by weight. When an owner or operator and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in paragraph (d)(1) of this section shall be used to resolve the disagreement.

(ii) Conversely, the owner or operator may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.

(3) If an owner or operator determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in paragraph (d)(1) of this section, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(4) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

(e) When a flare is used to comply with §63.172(d), the owner or operator shall comply with paragraphs (e)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(1) Conduct a visible emission test using the techniques specified in §63.11(b)(4).

(2) Determine the net heating value of the gas being combusted using the techniques specified in §63.11(b)(6).

(3) Determine the exit velocity using the techniques specified in either §63.11(b)(7)(i) (and §63.11(b)(7)(iii), where applicable) or §63.11(b)(8), as appropriate.

(f) The following procedures shall be used to pressure test batch product-process equipment for pressure or vacuum loss to demonstrate compliance with the requirements of §63.178(b)(3)(i) of this subpart.

(1) The batch product-process equipment train shall be pressurized with a gas to a pressure less than the set pressure of any safety relief devices or valves or to a pressure slightly above the operating pressure of the equipment, or alternatively, the equipment shall be placed under a vacuum.

(2) Once the test pressure is obtained, the gas source or vacuum source shall be shut off.

(3) The test shall continue for not less than 15 minutes unless it can be determined in a shorter period of time that the allowable rate of pressure drop or of pressure rise was exceeded. The pressure in the batch product-process equipment shall be measured after the gas or vacuum source is shut off and at the end of the test period. The rate of change in pressure in the batch product-process equipment shall be calculated using the following equation:

$$\text{Delta } P/t = (|P_f - P_i|) / (t_f - t_i)$$

where:

DP/t= Change in pressure, psig/hr.
P_f= Final pressure, psig.
P_i= Initial pressure, psig.
t_f—t_i= Elapsed time, hours.

(4) The pressure shall be measured using a pressure measurement device (gauge, manometer, or equivalent) which has a precision of ±2.5 millimeter mercury in the range of test pressure and is capable of measuring pressures up to the relief set pressure of the pressure relief device. If such a pressure measurement device is not reasonably available, the owner or operator shall use a pressure measurement device with a precision of at least +10 percent of the test pressure of the equipment and shall extend the duration of the test for the time necessary to detect a pressure loss or rise that equals a rate of one psig per hour.

(5) An alternative procedure may be used for leak testing the equipment if the owner or operator demonstrates the alternative procedure is capable of detecting a pressure loss or rise.

(g) The following procedures shall be used to pressure-test batch product-process equipment using a liquid to demonstrate compliance with the requirements of §63.178(b)(3)(ii) of this subpart.

(1) The batch product-process equipment train, or section of the train, shall be filled with the test liquid (e.g., water, alcohol) until normal operating pressure is obtained. Once the equipment is filled, the liquid source shall be shut off.

(2) The test shall be conducted for a period of at least 60 minutes, unless it can be determined in a shorter period of time that the test is a failure.

(3) Each seal in the equipment being tested shall be inspected for indications of liquid dripping or other indications of fluid loss. If there are any indications of liquids dripping or of fluid loss, a leak is detected.

(4) An alternative procedure may be used for leak testing the equipment, if the owner or operator demonstrates the alternative procedure is capable of detecting losses of fluid.

59. **40 CFR 63.181 Record keeping requirements.**

(a) An owner or operator of more than one process unit subject to the provisions of this subpart may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site.

(b) Except as provided in paragraph (e) of this section, the following information pertaining to all equipment in each process unit subject to the requirements in §§63.162 through 63.174 of this subpart shall be recorded:

(1) (i) A list of identification numbers for equipment (except connectors exempt from monitoring and record keeping identified in §63.174 of this subpart and instrumentation systems) subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by §63.174(b)(1) or (b)(2) of this subpart.

(ii) A schedule by process unit for monitoring connectors subject to the provisions of §63.174(a) of this subpart and valves subject to the provisions of §63.168(d) of this subpart.

(iii) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.

(2) (i) A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.163(g), §63.164(h), §63.165(c), or §63.173(f) of this subpart.

(ii) A list of identification numbers for compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of §63.164(i) of this subpart.

(iii) Identification of surge control vessels or bottoms receivers subject to the provisions of this subpart that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.170 of this subpart.

(3) (i) A list of identification numbers for pressure relief devices subject to the provisions in §63.165(a) of this subpart.

(ii) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of §63.165(d) of this subpart.

(4) Identification of instrumentation systems subject to the provisions of this subpart. Individual components in an instrumentation system need not be identified.

(5) Identification of screwed connectors subject to the requirements of §63.174(c)(2) of this subpart. Identification can be by area or grouping as long as the total number within each group or area is recorded.

(6) The following information shall be recorded for each dual mechanical seal system:

(i) Design criteria required in §§63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) of this subpart and an explanation of the design criteria; and

(ii) Any changes to these criteria and the reasons for the changes.

(7) The following information pertaining to all pumps subject to the provisions of §63.163(j), valves subject to the provisions of §63.168(h) and (i) of this subpart, agitators subject to the provisions of §63.173(h) through (j), and connectors subject to the provisions of §63.174(f) and (g) of this subpart shall be recorded:

(i) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.

(ii) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.

(iii) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

(8) (i) A list of valves removed from and added to the process unit, as described in §63.168(e)(1) of this subpart, if the net credits for removed valves is expected to be used.

(ii) A list of connectors removed from and added to the process unit, as described in §63.174(i)(1) of this subpart, and documentation of the integrity of the weld for any removed connectors, as required in §63.174(j) of this subpart. This is not required unless the net credits for removed connectors is expected to be used.

(9) (i) For batch process units that the owner or operator elects to monitor as provided under §63.178(c) of this subpart, a list of equipment added to batch product process units since the last monitoring period required in §63.178(c)(3)(ii) and (3)(iii) of this subpart.

(ii) Records demonstrating the proportion of the time during the calendar year the equipment is in use in a batch process that is subject to the provisions of this subpart. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the owner or operator does not adjust monitoring frequency by the time in use, as provided in §63.178(c)(3)(iii) of this subpart.

(10) For any leaks detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(c) For visual inspections of equipment subject to the provisions of this subpart (e.g., §63.163(b)(3), §63.163(e)(4)(i)), the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in paragraph (d) of this section for leaking equipment identified in this inspection, except as provided in paragraph (e) of this section. These records shall be retained for 2 years.

(d) When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, the following information shall be recorded and kept for 2 years:

(1) The instrument and the equipment identification number and the operator name, initials, or identification number.

(2) The date the leak was detected and the date of first attempt to repair the leak.

(3) The date of successful repair of the leak.

(4) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

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

(i) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(6) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(7) (i) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in §63.174(b) of this subpart, as described in §63.174(c)(1) of this subpart, unless the owner or operator elects to comply with the provisions of §63.174(c)(1)(ii) of this subpart.

(ii) The date and results of monitoring as required in §63.174(c) of this subpart. If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(i) of this section, then all connectors within the designated location shall be monitored.

(8) The date and results of the monitoring required in §63.178(c)(3)(i) of this subpart for equipment added to a batch process unit since the last monitoring period required in §63.178(c)(3)(ii) and (c)(3)(iii) of this subpart. If no leaking equipment is found in this monitoring, the owner or operator shall record that the inspection was performed. Records of the actual monitoring results are not required.

(9) Copies of the periodic reports as specified in §63.182(d) of this subpart, if records are not maintained on a computerized database capable of generating summary reports from the records.

(e) The owner or operator of a batch product process who elects to pressure test the batch product process equipment train to demonstrate compliance with this subpart is exempt from the requirements of paragraphs (b),

(c), (d), and (f) of this section. Instead, the owner or operator shall maintain records of the following information:

(1) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train.

(2) [Reserved]

(3) Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of this subpart is not required. Equipment in a batch product process subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.

(4) The dates of each pressure test required in §63.178(b) of this subpart, the test pressure, and the pressure drop observed during the test.

(5) Records of any visible, audible, or olfactory evidence of fluid loss.

(6) When a batch product process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:

(i) The date of each pressure test and the date of each leak repair attempt.

(ii) Repair methods applied in each attempt to repair the leak.

(iii) The reason for the delay of repair.

(iv) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

(v) The date of successful repair.

(f) The dates and results of each compliance test required for compressors subject to the provisions in §63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in §§63.165(a) and (b) of this subpart. The results shall include:

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

(2) The maximum instrument reading measured at each piece of equipment during each compliance test.

(g) The owner or operator shall maintain records of the information specified in paragraphs (g)(1) through (g)(3) of this section for closed-vent systems and control devices subject to the provisions of §63.172 of this subpart. The records specified in paragraph (g)(1) of this section shall be retained for the life of the equipment. The records specified in paragraphs (g)(2) and (g)(3) of this section shall be retained for 2 years.

(1) The design specifications and performance demonstrations specified in paragraphs (g)(1)(i) through (g)(1)(iv) of this section.

(i) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.

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

(iii) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by §63.11(b) of subpart A of this part.

(iv) A description of the parameter or parameters monitored, as required in §63.172(e) of this subpart, 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.

(2) Records of operation of closed-vent systems and control devices, as specified in paragraphs (g)(2)(i) through (g)(2)(iii) of this section.

(i) Dates and durations when the closed-vent systems and control devices required in §§63.163 through 63.166, and §63.170 of this subpart are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.

(ii) Dates and durations during which the monitoring system or monitoring device is inoperative.

(iii) Dates and durations of start-ups and shutdowns of control devices required in §§63.163 through 63.166, and §63.170 of this subpart.

(3) Records of inspections of closed-vent systems subject to the provisions of §63.172 of this subpart, as specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this section.

(i) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) of this subpart during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(ii) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) of this subpart during which leaks were detected, the information specified in paragraph (d) of this section shall be recorded.

(h) Each owner or operator of a process unit subject to the requirements of §§63.175 and 63.176 of this subpart shall maintain the records specified in paragraphs (h)(1) through (h)(9) of this section for the period of the quality improvement program for the process unit.

(1) For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in §63.175(d) of this subpart:

(i) All data required in §63.175(d)(2) of this subpart.

(ii) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter.

(iii) The beginning and ending dates while meeting the requirements of §63.175(d) of this subpart.

(2) For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in §63.175(e) of this subpart:

(i) All data required in §63.175(e)(2) of this subpart.

(ii) The percent leaking valves observed each quarter.

(iii) Documentation of all inspections conducted under the requirements of §63.175(e)(4) of this subpart, and any recommendations for design or specification changes to reduce leak frequency.

(iv) The beginning and ending dates while meeting the requirements of §63.175(e) of this subpart.

(3) For owners or operators subject to the requirements of the pump quality improvement program as specified in §63.176 of this subpart:

(i) All data required in §63.176(d)(2) of this subpart.

(ii) The rolling average percent leaking pumps.

(iii) Documentation of all inspections conducted under the requirements of §63.176(d)(4) of this subpart, and any recommendations for design or specification changes to reduce leak frequency.

(iv) The beginning and ending dates while meeting the requirements of §63.176(d) of this subpart.

(4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.

(5) Records of all analyses required in §§63.175(e) and 63.176(d) of this subpart. The records will include the following:

(i) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.

(ii) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.

(iii) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under §§63.175(e)(6)(iii) and 63.176(d)(6)(iii) of this subpart.

(iv) The beginning date and duration of performance trials of each candidate superior emission performing technology.

(6) All records documenting the quality assurance program for valves or pumps as specified in §§63.175(e)(7) and 63.176(d)(7) of this subpart.

(7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in §63.175(e)(7) and §63.176(d)(7) of this subpart.

(8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in §63.176(d)(8) of this subpart.

(9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.

(i) The owner or operator of equipment in heavy liquid service shall comply with the requirements of either paragraph (i)(1) or (i)(2) of this section, as provided in paragraph (i)(3) of this section.

(1) Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.

(2) When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service.

(3) A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid service." Examples of information that could document this include, but are not limited to, records of chemicals purchased forthe process, analyses of process stream composition, engineering calculations, or process knowledge.

(j) Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of this subpart under §63.160 of this subpart.

(k) Owners and operators choosing to comply with the requirements of §63.179 of this subpart shall maintain the following records:

(1) Identification of the process unit(s) and the organic HAP's they handle.

(2) A schematic of the process unit, enclosure, and closed-vent system.

(3) A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.

60. **40 CFR 63.182 Reporting requirements.**

(a) Each owner or operator of a source subject to this subpart shall submit the reports listed in paragraphs (a)(1) through (a)(5) of this section. Owners or operators requesting an extension of compliance shall also submit the report listed in paragraph (a)(6) of this section.

(1) An Initial Notification described in paragraph (b) of this section, and

(2) A Notification of Compliance Status described in paragraph (c) of this section,

(3) Periodic Reports described in paragraph (d) of this section, and

(4) Reserved

(5) Reserved

(6) Pursuant to section 112(i)(3)(B) of the Act, an owner or operator may request an extension allowing an existing source up to 1 additional year beyond the compliance date specified in the subpart that references this subpart.

(i) For purposes of this subpart, a request for an extension shall be submitted to the operating permit authority as part of the operating permit application. If the State in which the source is located does not have an approved operating permit program, a request for an extension shall be submitted to the Administrator as a separate submittal. The dates specified in §63.6(i) of subpart A of this part for submittal of requests for extensions shall not apply to sources subject to this subpart.

(ii) A request for an extension of compliance must include the data described in §63.6(i)(6)(i)(A), (B), and (D) of subpart A of this part.

(iii) The requirements in §63.6(i)(8) through (i)(14) of subpart A of this part will govern the review and approval of requests for extensions of compliance with this subpart.

(b) Each owner or operator of an existing or new source subject to the provisions of this subpart shall submit a written Initial Notification to the Administrator, containing the information described in paragraph (b)(1), according to the schedule in paragraph (b)(2) of this section. The Initial Notification provisions in §63.9(b)(1) through (b)(3) of subpart A of this part shall not apply to owners or operators of sources subject to this subpart.

(1) The Initial Notification shall include the following information:

(i) The name and address of the owner or operator;

(ii) The address (physical location) of the affected source;

(iii) An identification of the chemical manufacturing processes subject to this subpart; and

(iv) A statement of whether the source can achieve compliance by the applicable compliance date specified in the subpart in 40 CFR part 63 that references this subpart.

(2) The Initial Notification shall be submitted according to the schedule in paragraph (b)(2)(i), (b)(2)(ii), or (b)(2)(iii) of this section, as applicable.

(i) For an existing source, the Initial Notification shall be submitted within 120 days after the date of promulgation of the subpart that references this subpart.

(ii) For a new source that has an initial start-up 90 days after the date of promulgation of this subpart or later, the application for approval of construction or reconstruction required by §63.5(d) of subpart A of this part shall be submitted in lieu of the Initial Notification. The application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references this subpart).

(iii) For a new source that has an initial start-up prior to 90 days after the date of promulgation of the applicable subpart, the Initial Notification shall be submitted within 90 days after the date of promulgation of the subpart that references this subpart.

(c) Each owner or operator of a source subject to this subpart shall submit a Notification of Compliance Status within 90 days of the compliance dates specified in the subpart in 40 CFR part 63 that references this subpart, except as provided in paragraph (c)(4) of this section.

(1) The notification shall provide the information listed in paragraphs (c)(1)(i) through (c)(1)(iv) of this section for each process unit subject to the requirements of §63.163 through §63.174 of this subpart.

(i) Process unit identification.

(ii) Number of each equipment type (e.g., valves, pumps) excluding equipment in vacuum service.

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

(iv) Planned schedule for each phase of the requirements in §63.163 and §63.168 of this subpart.

(2) The notification shall provide the information listed in paragraphs (c)(2)(i) and (c)(2)(ii) of this section for each process unit subject to the requirements of §63.178(b) of this subpart.

(i) Batch products or product codes subject to the provisions of this subpart, and

(ii) Planned schedule for pressure testing when equipment is configured for production of products subject to the provisions of this subpart.

(3) The notification shall provide the information listed in paragraphs (c)(3)(i) and (c)(3)(ii) of this section for each process unit subject to the requirements in §63.179 of this subpart.

(i) Process unit identification.

(ii) A description of the system used to create a negative pressure in the enclosure and the control device used to comply with the requirements of §63.172 of this subpart.

(4) For existing sources subject to subpart F of this part, the Notification of Compliance Status shall be submitted for the group of process units with the earliest compliance date specified in §63.100(k) of subpart F of this part, by no later than 90 days after the compliance date for that group. The Notification of Compliance Status for each subsequent group shall be submitted as part of the first periodic report that is due not less than 90 days after the compliance date for that group.

(d) The owner or operator of a source subject to this subpart shall submit Periodic Reports.

(1) A report containing the information in paragraphs (d)(2), (d)(3), and (d)(4) of this section shall be submitted semiannually starting 6 months after the Notification of Compliance Status, as required in paragraph (c) of this section. The first periodic report shall cover the first 6 months after the compliance date specified in §63.100(k)(3) of subpart F. Each subsequent periodic report shall cover the 6 month period following the preceding period.

(2) For each process unit complying with the provisions of §63.163 through §63.174 of this subpart, the summary information listed in paragraphs (i) through (xvi) of this paragraph for each monitoring period during the 6-month period.

(i) The number of valves for which leaks were detected as described in §63.168(b) of this subpart, the percent leakers, and the total number of valves monitored;

(ii) The number of valves for which leaks were not repaired as required in §63.168(f) of this subpart, identifying the number of those that are determined nonrepairable;

(iii) The number of pumps for which leaks were detected as described in §63.163(b) of this subpart, the percent leakers, and the total number of pumps monitored;

(iv) The number of pumps for which leaks were not repaired as required in §63.163(c) of this subpart;

(v) The number of compressors for which leaks were detected as described in §63.164(f) of this subpart;

(vi) The number of compressors for which leaks were not repaired as required in §63.164(g) of this subpart;

(vii) The number of agitators for which leaks were detected as described in §63.173(a) and (b) of this subpart;

(viii) The number of agitators for which leaks were not repaired as required in §63.173(c) of this subpart;

(ix) The number of connectors for which leaks were detected as described in §63.174(a) of this subpart, the percent of connectors leaking, and the total number of connectors monitored;

(x) [Reserved]

(xi) The number of connectors for which leaks were not repaired as required in §63.174(d) of this subpart, identifying the number of those that are determined nonrepairable;

(xii) [Reserved]

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

(xiv) The results of all monitoring to show compliance with §§63.164(i), 63.165(a), and 63.172(f) of this subpart conducted within the semiannual reporting period.

(xv) If applicable, the initiation of a monthly monitoring program under §63.168(d)(1)(i) of this subpart, or a quality improvement program under either §§63.175 or 63.176 of this subpart.

(xvi) If applicable, notification of a change in connector monitoring alternatives as described in §63.174(c)(1) of this subpart.

(xvii) If applicable, the compliance option that has been selected under §63.172(n).

(3) For owners or operators electing to meet the requirements of §63.178(b) of this subpart, the report shall include the information listed in paragraphs (i) through (v) of this paragraph for each process unit.

(i) Batch product process equipment train identification;

(ii) The number of pressure tests conducted;

(iii) The number of pressure tests where the equipment train failed the pressure test;

(iv) The facts that explain any delay of repairs; and

(v) The results of all monitoring to determine compliance with §63.172(f) of this subpart.

(4) The information listed in paragraph (c) of this section for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

61. **40 CFR 63.183 Implementation and enforcement.**

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.160, 63.162 through 63.176, 63.178 through 63.179. Follow the applicable procedures of §63.177 to request an alternative means of emission limitation for batch processes and enclosed-vented process units. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart. Where these standards reference another subpart and modify the requirements, the requirements shall be modified as described in this subpart. Delegation of the modified requirements will also occur according to the delegation provisions of the referenced subpart.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to record keeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

62. **40 CFR Part 63, Subpart H tables**

Table 1 to 40 CFR Part 63, Subpart H -- Batch Processes Monitoring Frequency for Equipment Other than Connectors			
Operating Time (% of year)	Equivalent continuous process monitoring frequency time in use		
	Monthly	Quarterly	Semiannually
0 to < 25	Quarterly	Semiannually	Annually
25 to < 50	Quarterly	Semiannually	Annually
50 to < 75	Bimonthly	Three Times	Semiannually
75 to 100	Monthly	Quarterly	Semiannually

Table 2 to 40 CFR Part 63, Subpart H -- Surge Control Vessels and Bottoms Receivers at Existing Sources	
Vessel capacity	Vapor Pressure[1] (kilopascals)
75 m^3 ≤ 151 m^3	≥ 13.1
151 m^3 ≤ capacity	≥ 5.2

1 Maximum true vapor pressure of total organic HAP at operating temperature as defined in Subpart G of 40 CFR Part 63.

Table 3 to 40 CFR Part 63, Subpart H -- Surge Control Vessels and Bottoms Receivers at New Sources	
Vessel capacity	Vapor pressure[1]
38 $m^3 \leq$ 151 m^3	$\geq$13.1 kilopascals
151 $m^3 \geq$ capacity	$\geq$0.7 kilopascals

1 Maximum true vapor pressure of total organic HAP at operating temperature as defined in Subpart G of 40 CFR Part 63.

Table 4 to 40 CFR Part 63, Subpart H -- Applicable 40 CFR Part 63 General Provisions
40 CFR 63.1(a)(1), (a)(2), (a)(3), (a)(13), (a)(14), (b)(2) and (c)(4) 40 CFR 63.2 40 CFR 63.5(a)(1), (a)(2), (b), (d)(1)(ii), (d)(4), (e), (f)(1) and (f)(2) 40 CFR 63.6(a), (b)(3), (c)(5), (i)(1), (i)(2), (i)(4)(i)(A), (i)(5) through (i)(14), (i)(16) and (j) 40 CFR 63.9(a)(2), (b)(4)(i)[a], (b)(4)(ii), (b)(4)(iii), (b)(5)[a], (c) and (d) 40 CFR 63.10(d)(4) 40 CFR 63.12(b) a The notifications specified in 40 CFR 63.9(b)(4)(i) and (b)(5) shall be submitted at the times specified in 40 CFR Part 65.

Subpart CC—National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

[The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart CC: J001, J004, J005, J006, P007, P009, P010, P011, P013, P014, P017, P019, P020, P021, P022, P023, P025, P028, P029, P036, P037, P041, P042, P043, P046, P047, P059, P060, P061, P802, T010, T011, T012, T013, T014, T015, T016, T017, T018, T019, T020, T021, T024, T025, T026, T027, T028, T029, T030, T031, T032, T033, T034, T035, T036, T037, T038, T039, T040, T041, T044, T045, T046, T047, T051, T053, T055, T056, T058, T059, T060, T063, T064, T066, T073, T074, T075, T076, T077, T078, T079, T080, T081, T082, T084, T085, T086, T087, T088, T089, T090, T091, T092, T093, T096, T097, T099, T100, T101, T102, T106, T107, T108, T109, T110, T111, T113, T114, T115, T116, T120, T136, T137, T138, T139, T164, T166, T167, T170, T174, T175, T176, T177, T178, T179, T180, T181, T182, T183, T184, T185, T186, T187, and T188.]

63. **40 CFR 63.640 Applicability and designation of affected source.**

(a) This subpart applies to petroleum refining process units and to related emission points that are specified in paragraphs (c)(5) through (c)(7) of this section that are located at a plant site that meet the criteria in paragraphs (a)(1) and (a)(2) of this section;

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

(2) Emit or have equipment containing or contacting one or more of the hazardous air pollutants listed in table 1 of this subpart.

(b) (1) If the predominant use of the flexible operation unit, as described in paragraphs (b)(1)(i) and (ii) of this section, is as a petroleum refining process unit, as defined in §63.641, then the flexible operation unit shall be subject to the provisions of this subpart.

(i) Except as provided in paragraph (b)(1)(ii) of this section, the predominant use of the flexible operation unit shall be the use representing the greatest annual operating time.

(ii) If the flexible operation unit is used as a petroleum refining process unit and for another purpose equally based on operating time, then the predominant use of the flexible operation unit shall be the use that produces the greatest annual production on a mass basis.

(2) The determination of applicability of this subpart to petroleum refining process units that are designed and operated as flexible operation units shall be reported as specified in §63.654(h)(6)(i).

(c) For the purpose of this subpart, the affected source shall comprise all emission points, in combination, listed in paragraphs (c)(1) through (c)(7) of this section that are located at a single refinery plant site.

(1) All miscellaneous process vents from petroleum refining process units meeting the criteria in paragraph (a) of this section;

(2) All storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section;

(3) All wastewater streams and treatment operations associated with petroleum refining process units meeting the criteria in paragraph (a) of this section;

(4) All equipment leaks from petroleum refining process units meeting the criteria in paragraph (a) of this section;

(5) All gasoline loading racks classified under Standard Industrial Classification code 2911 meeting the criteria in paragraph (a) of this section;

(6) All marine vessel loading operations located at a petroleum refinery meeting the criteria in paragraph (a) of this sectionand the applicability criteria of subpart Y, §63.560; and

(7) All storage vessels and equipment leaks associated with a bulk gasoline terminal or pipeline breakout station classified under Standard Industrial Classification code 2911 located within a contiguous area and under common control with a refinery meeting the criteria in paragraph (a) of this section.

(d) The affected source subject to this subpart does not include the emission points listed in paragraphs (d)(1) through (d)(5) of this section.

(1) Stormwater from segregated stormwater sewers;

(2) Spills;

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

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

(5) Emission points routed to a fuel gas system, as defined in §63.641 of this subpart. No testing, monitoring, record keeping, or reporting is required for refinery fuel gas systems or emission points routed to refinery fuel gas systems.

(e) The owner or operator shall follow the procedures specified in paragraphs (e)(1) and (e)(2) of this sectionto deter mine whether a storage vessel is part of a source to which this subpart applies.

(1) Where a storage vessel is used exclusively by a process unit, the storage vessel shall be considered part of that process unit.

(i) If the process unit is a petroleum refining process unit subject to this subpart, then the storage vessel is part of the affected source to which this subpart applies.

(ii) If the process unit is not subject to this subpart, then the storage vessel is not part of the affected source to which this subpart applies.

(2) If a storage vessel is not dedicated to a single process unit, then the applicability of this subpart shall be determined according to the provisions in paragraphs (e)(2)(i) through (e)(2)(iii) of this section.

(i) If a storage vessel is shared among process units and one of the process units has the predominant use, as determined by paragraphs (e)(2)(i)(A) and (e)(2)(i)(B) of this section, then the storage vessel is part of that process unit.

(A) If the greatest input on a volume basis into the storage vessel is from a process unit that is located on the same plant site, then that process unit has the predominant use.

(B) If the greatest input on a volume basis into the storage vessel is provided from a process unit that is not located on the same plant site, then the predominant use shall be the process unit that receives the greatest amount of material on a volume basis from the storage vessel at the same plant site.

(ii) If a storage vessel is shared among process units so that there is no single predominant use, and at least one of those process units is a petroleum refining process unit subject to this subpart, the storage vessel shall be considered to be part of the petroleum refining process unit that is subject to this subpart. If more than one petroleum refining process unit is subject to this subpart, the owner or operator may assign the storage vessel to any of the pe-troleum refining process units subject to this subpart.

(iii) If the predominant use of a storage vessel varies from year to year, then the applicability of this subpart shall be determined based on the utilization of that storage vessel during the year preceding promulgation of this subpart. This determination shall be reported as specified in §63.654(h)(6)(ii) of this subpart.

(f) The owner or operator shall follow the procedures specified in paragraphs (f)(1) through (f)(5) of this section to determine whether a miscellaneous process vent from a distillation unit is part of a source to which this subpart applies.

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

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

(3) If a distillation unit is shared among process units so that there is no single predominant use, as described in paragraphs (f)(1) and (f)(2) of this section, and at least one of those process units is a petroleum refining process unit subject to this subpart, the distillation unit shall be assigned to the petroleum refining process unit that is subject to this subpart. If more than one petroleum refining process unit is subject to this subpart, the owner or operator may assign the distillation unit to any of the petroleum refining process units subject to this rule.

(4) If the process unit to which the distillation unit is assigned is a petroleum refining process unit subject to this subpart and the vent stream contains greater than 20 parts per million by volume total organic hazardous air pollutants, then the vent from the distillation unit is considered a miscellaneous process vent (as defined in §63.641 of this subpart) and is part of the source to which this subpart applies.

(5) If the predominant use of a distillation unit varies from year to year, then the applicability of this subpart shall be determined based on the utilization of that distillation unit during the year preceding promulgation of this subpart. This determination shall be reported as specified in §63.654(f)(6)(iii).

(g) The provisions of this subpart do not apply to the processes specified in paragraphs (g)(1) through (g)(7) of this section.

(1) Research and development facilities, regardless of whether the facilities are located at the same plant site as a petroleum refining process unit that is subject to the provisions of this subpart;

(2) Equipment that does not contain any of the hazardous air pollutants listed in table 1 of this subpart that is located within a petroleum refining process unit that is subject to this subpart;

(3) Units processing natural gas liquids;

(4) Units that are used specifically for recycling discarded oil;

(5) Shale oil extraction units;

(6) Ethylene processes; and

(7) Process units and emission points subject to subparts F, G, H, and I of this part.

(h) Except as provided in paragraphs (k), (l), or (m) of this section, sources subject to this subpart are required to achieve compliance on or before the dates specified in paragraphs (h)(1) through (h)(4) of this section.

(1) New sources that commence construction or reconstruction after July 14, 1994 shall be in compliance with this subpart upon initial startup or the date of promulgation of this subpart, whichever is later, as provided in §63.6(b) of subpart A of this part.

(2) Except as provided in paragraphs (h)(3) through (h)(5) of this section, existing sources shall be in compliance with this subpart no later than August 18, 1998, except as provided in §63.6(c) of subpart A of this part, or unless an extension has been granted by the Administrator as provided in §63.6(i) of subpart A of this part.

(3) Marine tank vessels at existing sources shall be in compliance with this subpart no later than August 18, 1999 unless the vessels are included in an emissions average to generate emission credits. Marine tank vessels used to generate credits in an emissions average shall be in compliance with this subpart no later than August 18, 1998 unless an extension has been granted by the Administrator as provided in §63.6(i).

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

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

(i) Phase I (see table 2 of this subpart), beginning on August 18, 1998;

(ii) Phase II (see table 2 of this subpart), beginning no later than August 18, 1999; and

(iii) Phase III (see table 2 of this subpart), beginning no later than February 18, 2001.

(i) If an additional petroleum refining process unit is added to a plant site that is a major source as defined in section 112(a) of the Clean Air Act, the addition shall be subject to the requirements for a new source if it meets the criteria specified in paragraphs (i)(1) through (i)(3) of this section:

(1) It is an addition that meets the definition of construction in §63.2 of subpart A of this part;

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

(3) The addition has the potential to emit 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

(j) If any change is made to a petroleum refining process unit subject to this subpart, the change shall be subject to the requirements for a new source if it meets the criteria specified in paragraphs (j)(1) and (j)(2) of this section:

(1) It is a change that meets the definition of reconstruction in §63.2 of subpart A of this part; and

(2) Such reconstruction commenced after July 14, 1994.

(k) If an additional petroleum refining process unit is added to a plant site or a change is made to a petroleum refining process unit and the addition or change is determined to be subject to the new source requirements according to paragraphs (i) or (j) of this section it must comply with the requirements specified in paragraphs (k)(1) and (k)(2) of this section:

(1) The reconstructed source, addition, or change shall be in compliance with the new source requirements upon initial startup of the reconstructed source or by the date of promulgation of this subpart, whichever is later; and

(2) The owner or operator of the reconstructed source, addition, or change shall comply with the reporting and record keeping requirements that are applicable to new sources. The applicable reports include, but are not limited to:

(i) The application for approval of construction or reconstruction shall be submitted as soon as practical before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of this subpart);

(ii) The Notification of Compliance Status report as required by §63.654(f) for a new source, addition, or change;

(iii) Periodic Reports and Other Reports as required by §63.654(g) and (h);

(iv) Reports and notifications required by §60.487 of subpart VV of part 60 or §63.182 of subpart H of this part. The requirements for subpart H are summarized in table 3 of this subpart;

(v) Reports required by 40 CFR 61.357 of subpart FF;

(vi) Reports and notifications required by §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

(vii) Reports and notifications required by §§63.565 and 63.567 of subpart Y of this part. These requirements are summarized in table 5 of this subpart.

(l) If an additional petroleum refining process unit is added to a plant site or if a miscellaneous process vent, storage vessel, gasoline loading rack, or marine tank vessel loading operation that meets the criteria in paragraphs (c)(1) through (c)(7) of this section 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) is made to an existing petroleum refining process unit, and if the addition or process change is not subject to the new source requirements as determined according to paragraphs (i) or (j) of this section, the requirements in paragraphs (l)(1) through (l)(3) of this section shall apply. Examples of process changes include, but are not limited to, changes in production capacity, or feed or raw material where the change requires construction or physical alteration of the existing equipment or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph and paragraph (m) of this section, process changes do not include: Process upsets, unintentional temporary process changes, and changes that are within the equipment configuration and operating conditions documented in the Notification of Compliance Status report required by §63.654(f).

(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.

(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 this subpart by the dates specified in paragraphs (l)(2)(i) or (l)(2)(ii) of this section, as applicable.

(i) If a petroleum refining process unit is added to a plant site or an emission point(s) is added to any existing petroleum refining process unit, the added emission point(s) shall be in compliance upon initial startup of any added petroleum refining process unit or emission point(s) or by 3 years after the date of promulgation of this subpart, whichever is later.

(ii) If a deliberate operational process change to an existing petroleum refining process unit causes a Group 2 emission point to become a Group 1 emission point (as defined in §63.641), the owner or operator shall be in compliance upon initial startup or by 3 years after the date of promulgation of this subpart, whichever is later, unless the owner or operator 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 owner or operator shall follow the procedures in paragraphs (m)(1) through (m)(3) of this section to establish a compliance date.

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

(i) The Notification of Compliance Status report as required by §63.654(f) for the emission points that were added or changed;

(ii) Periodic Reports and other reports as required by §63.654(g) and (h);

(iii) Reports and notifications required by sections of subpart A of this partthat are applicable to this subpart, as identified in table 6 of this subpart.

(iv) Reports and notifications required by §63.182, or 40 CFR 60.487. The requirements of subpart H of this partare summarized in table 3 of this subpart;

(v) Reports required by §61.357 of subpart FF;

(vi) Reports and notifications required by §63.428(b), (c), (g)(1), and (h)(1) through (h)(3) of subpart R of this part. These requirements are summarized in table 4 of this subpart; and

(vii) Reports and notifications required by §63.567 of subpart Y of this part. These requirements are summarized in table 5 of this subpart.

(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 §63.648. A notification of compliance status report shall not be required for such added equipment.

(m) If a change that does not meet the criteria in paragraph (l) of this sectionis 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 §63.641), then the owner or operator shall comply with the requirements of this subpart for existing sources for the Group 1 emission point as expeditiously as practicable, but in no event later than 3 years after the emission point becomes Group 1.

(1) The owner or operator shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

(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.

(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.

(n) Overlap of subpart CC with other regulations for storage vessels.

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

(2) After the compliance dates specified in paragraph (h) of this section a Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with this subpart.

(3) After the compliance dates specified in paragraph (h) of this section, 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, subpartKb is required to comply only with 40 CFR part 60, subpart Kb except as provided in paragraph (n)(8) of this section.

(4) After the compliance dates specified in paragraph (h) of this section, a Group 2 storage vessel that is part of a new source and is subject to 40 CFR 60.110b, but is not required to apply controls by 40 CFR 60.110b or 60.112b is required to comply only with this subpart.

(5) After the compliance dates specified in paragraph (h) of this section a Group 1 storage vessel that is also subject to the provisions of 40 CFR part 60, subparts Kor Ka is required to only comply with the provisions of this subpart.

(6) After compliance dates specified in paragraph (h) of this section, 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 paragraph (n)(9) of this section.

(7) After the compliance dates specified in paragraph (h) of this section, 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 this subpart.

(8) Storage vessels described by paragraphs (n)(1) and (n)(3) of this section are to comply with 40 CFR part 60, subpart Kb except as provided for in paragraphs (n)(8)(i) through (n)(8)(vi) of this section.

(i) Storage vessels that are to comply with §60.112b(a)(2) of subpart Kb are exempt from the secondary seal requirements of §60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by §60.113b(b) of subpart Kb.

(ii) If the owner or operator 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 owner or operator shall comply with the requirements in either §63.120(b)(7)(i) or §63.120(b)(7)(ii) of subpart G.

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

(iv) If an extension is utilized in accordance with paragraph (n)(8)(iii) of this section, the owner or operator 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.

(v) Owners and operators 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.

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

(9) Storage vessels described by paragraph (n)(6) of this section that are to comply with 40 CFR part 60, subpart Ka, are to comply with only subpart Ka except as provided for in paragraphs (n)(9)(i) through (n)(9)(iv) of this section.

(i) If the owner or operator determines that it is unsafe to perform the seal gap measurements required in §60.113a(a)(1) of subpart Ka because the floating roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the owner or operator shall comply with the requirements in either §63.120(b)(7)(i) or §63.120(b)(7)(ii) of subpart G.

(ii) If a failure is detected during the seal gap measurements required by §60.113a(a)(1) of subpart Ka, and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the owner or operator may utilize up to 2 extensions of up to 30 additional calendar days each.

(iii) If an extension is utilized in accordance with paragraph (n)(9)(ii) of this section, the owner or operator shall, in the next periodic report, identify the vessel, describe the nature and date of the repair made or provide the date the storage vessel was emptied. The owner or operator shall also provide documentation of the decision to utilize an extension including a description of the failure, documentation that alternate storage capacity is unavailable, and a schedule of actions that will ensure that the control equipment will be repaired or the vessel emptied as soon as possible.

(iv) Owners and operators of storage vessels complying with subpart Ka of part 60 may submit the inspection reports required by §60.113a(a)(1)(i)(E) of subpart Ka as part of the periodic reports required by this subpart, rather than within the 60-day period specified in §60.113a(a)(1)(i)(E) of subpart Ka.

(o) Overlap of this subpart CC with other regulations for wastewater.

(1) After the compliance dates specified in paragraph (h) of this section a Group 1 wastewater stream managed in a piece of equipment that is also subject to the provisions of 40 CFR part 60, subpart QQQis required to comply only with this subpart.

(2) After the compliance dates specified in paragraph (h) of this section 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 §§63.133 through 63.147 of subpart G wastewater provisions of this part shall comply as specified in paragraph (o)(2)(i) or (o)(2)(ii) of this section. Compliance with the provisions of paragraph (o)(2)of this section shall constitute compliance with the requirements of this subpart for that wastewater stream.

(i) Comply with paragraphs (o)(2)(i)(A) through (o)(2)(i)(C) of this section.

(A) The provisions in §§63.133 through 63.140 of subpart G for all equipment used in the storage and conveyance of the Group 1 or Group 2 wastewater stream.

(B) The provisions in both 40 CFR part 61, subpart FF and in §§63.138 and 63.139 of subpart G for the treatment and control of the Group 1 or Group 2 wastewater stream.

(C) The provisions in §§63.143 through 63.148 of subpart G for monitoring and inspections of equipment and for record keeping and reporting requirements. The owner or operator is not required to comply with the monitoring, record keeping, and reporting requirements associated with the treatment and control requirements in 40 CFR part 61, subpart FF, §§61.355 through 61.357.

(ii) Comply with paragraphs (o)(2)(ii)(A) and (o)(2)(ii)(B) of this section.

(A) Comply with the provisions of §§63.133 through 63.148 and §§63.151 and 63.152 of subpart G.

(B) For any Group 2 wastewater stream or organic stream whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR part 61, subpart FF on or after December 31, 1992, comply with the requirements of §63.133 through§63.147 of subpart G for Group 1 wastewater streams.

(p) Overlap of subpart CC with other regulations for equipment leaks. After the compliance dates specified in paragraph (h) of this section equipment leaks that are also subject to the provisions of 40 CFR parts 60 and 61 are required to comply only with the provisions specified in this subpart.

(q) For overlap of subpart CCwith local or State regulations, the permitting authority for the affected source may allow consolidation of the monitoring, record keeping, and reporting requirements under this subpart with the monitoring, record keeping, and reporting requirements under other applicable requirements in 40 CFR parts 60, 61, or 63, and in any 40 CFR part 52 approved State implementation plan provided the implementation plan allows for approval of alternative monitoring, reporting, or record keeping requirements and provided that the permit contains an equivalent degree of compliance and control.

(r) Overlap of subpart CCwith other regulations for gasoline loading racks. After the compliance dates specified in paragraph (h) of this section, a Group 1 gasoline loading rack that is part of a source subject to subpart CC and also is subject to the provisions of 40 CFR part 60, subpart XX is required to comply only with this subpart.

64. **40 CFR 63.642 General standards.**

(a) Each owner or operator of a source subject to this subpart is required to apply for a part 70 or part 71 operating permit from the appropriate permitting authority. If the EPA has approved a State operating permit program under part 70, the permit shall be obtained from the State authority. If the State operating permit program has not been approved, the source shall apply to the EPA Regional Office pursuant to part 71.

(b) [Reserved]

(c) Table 6 of this subpart specifies the provisions of subpart A of this partthat apply and those that do not apply to owners and operators of sources subject to this subpart.

(d) Initial performance tests and initial compliance determinations shall be required only as specified in this subpart.

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

(2) The owner or operator shall notify the Administrator of the intention to conduct a performance test at least 30 days before the performance test is scheduled.

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

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

(e) Each owner or operator of a source subject to this subpart shall keep copies of all applicable reports and records required by this subpart for at least 5 years except as otherwise specified in this subpart. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

(f) All reports required under this subpart shall be sent to the Administrator at the addresses listed in §63.13 of subpart A of this part. If acceptable to both the Administrator and the owner or operator of a source, reports may be submitted on electronic media.

(g) The owner or operator of an existing source subject to the requirements of this subpart shall control emissions of organic HAP's to the level represented by the following equation:

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

where:

E_A = Emission rate, megagrams per year, allowed for the source.
0.02S EPV1 = Sum of the residual emissions, megagrams per year, from all Group 1 miscellaneous process vents, as defined in §63.641.
S EPV2 = Sum of the emissions, megagrams per year, from all Group 2 process vents, as defined in §63.641.
0.05S ES1 = Sum of the residual emissions, megagrams per year, from all Group 1 storage vessels, as defined in §63.641.
S ES2 = Sum of the emissions, megagrams per year, from all Group 2 storage vessels, as defined in §63.641.
S EGLR1C = Sum of the residual emissions, megagrams per year, from all Group 1 gasoline loading racks, as defined in §63.641.
S EGLR2 = Sum of the emissions, megagrams per year, from all Group 2 gasoline loading racks, as defined in §63.641.
(R)S EMV1 = Sum of the residual emissions megagrams per year, from all Group 1 marine tank vessels, as defined in §63.641.
R = 0.03 for existing sources, 0.02 for new sources.
S EMV2 = Sum of the emissions, megagrams per year from all Group 2 marine tank vessels, as defined in §63.641.
S EWW1C = Sum of the residual emissions from all Group 1 wastewater streams, as defined in §63.641. This term is calculated for each Group 1 stream according to the equation for EWW_{ic} in §63.652(h)(6).
S EWW2 = Sum of emissions from all Group 2 wastewater streams, as defined in §63.641.
The emissions level represented by this equation is dependent on the collection of emission points in the source. The level is not fixed and can change as the emissions from each emission point change or as the number of emission points in the source changes.

(h) The owner or operator of a new source subject to the requirements of this subpart shall control emissions of organic HAP's to the level represented by the equation in paragraph (g) of this section.

(i) The owner or operator of an existing source shall demonstrate compliance with the emission standard in paragraph (g) of this section by following the procedures specified in paragraph (k) of this sectionfor all

emission points, or by following the emissions averaging compliance approach specified in paragraph (l) of this sectionfor specified emission points and the procedures specified in paragraph (k) of this section for all other emission points within the source.

(j) The owner or operator of a new source shall demonstrate compliance with the emission standard in paragraph (h) of this section only by following the procedures in paragraph (k) of this section. The owner or operator of a new source may not use the emissions averaging compliance approach.

(k) The owner or operator of an existing source may comply, and the owner or operator of a new source shall comply, with the miscellaneous process vent provisions in §§63.643 through 63.645, the storage vessel provisions in §63.646, the wastewater provisions in §63.647, the gasoline loading rack provisions in §63.650, and the marine tank vessel loading operation provisions in §63.651 of this subpart.

(1) The owner or operator using this compliance approach shall also comply with the requirements of §63.654 as applicable.

(2) The owner or operator using this compliance approach is not required to calculate the annual emission rate specified in paragraph (g) of this section.

(l) The owner or operator of an existing source may elect to control some of the emission points within the source to different levels than specified under §§63.643 through 63.647, §§63.650 and 63.651 by using an emissions averaging compliance approach as long as the overall emissions for the source do not exceed the emission level specified in paragraph (g) of this section. The owner or operator using emissions averaging shall meet the requirements in paragraphs (l)(1) and (l)(2) of this section.

(1) Calculate emission debits and credits for those emission points involved in the emissions average according to the procedures specified in §63.652; and

(2) Comply with the requirements of §§63.652, 63.653, and 63.654, as applicable.

(m) A State may restrict the owner or operator of an existing source to using only the procedures in paragraph (k) of this section to comply with the emission standard in paragraph (g) of this section. Such a restriction would preclude the source from using an emissions averaging compliance approach.

65. **40 CFR 63.643 Miscellaneous process vent provisions.**

(a) The owner or operator of a Group 1 miscellaneous process vent as defined in §63.641 shall comply with the requirements of either paragraphs (a)(1) or (a)(2) of this section.

(1) Reduce emissions of organic HAP's using a flare that meets the requirements of §63.11(b) of subpart A of this part.

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

(b) If a boiler or process heater is used to comply with the percentage of reduction requirement or concentration limit specified in paragraph (a)(2) of this section, then the vent stream shall be introduced into the flame zone of such a device, or in a location such that the required percent reduction or concentration is achieved. Testing and monitoring is required only as specified in §63.644(a) and §63.645 of this subpart.

66. **40 CFR 63.644 Monitoring provisions for miscellaneous process vents.**

(a) Except as provided in paragraph (b) of this section, each owner or operator of a Group 1 miscellaneous process vent that uses a combustion device to comply with the requirements in §63.643(a) shall install the monitoring equipment specified in paragraph (a)(1), (a)(2), (a)(3), or (a)(4) of this section, depending on the type of combustion device used. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

(1) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(i) Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(ii) Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(2) Where a flare is used, a device (including but not limited to a thermocouple, an ultraviolet beam sensor, or an infrared sensor) capable of continuously detecting the presence of a pilot flame is required.

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

(4) Any boiler or process heater less than 44 megawatts design heat capacity where the vent stream is not introduced into the flame zone is required to use a temperature monitoring device in the firebox equipped with a continuous recorder.

(b) An owner or operator of a Group 1 miscellaneous process vent may request approval to monitor parameters other than those listed in paragraph (a) of this section. The request shall be submitted according to the procedures specified in §63.654(h). Approval shall be requested if the owner or operator:

(1) Uses a control device other than an incinerator, boiler, process heater, or flare; or

(2) Uses one of the control devices listed in paragraph (a) of this section, but seeks to monitor a parameter other than those specified in paragraph (a) of this section.

(c) The owner or operator of a Group 1 miscellaneous process vent using a vent system that contains bypass lines that could divert a vent stream away from the control device used to comply with paragraph (a) of this section shall comply with either paragraph (c)(1) or (c)(2) of this section. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, pressure relief valves needed for safety reasons, and equipment subject to §63.648 are not subject to this paragraph.

(1) Install, calibrate, maintain, and operate a flow indicator that determines whether a vent stream flow is present at least once every hour. Records shall be generated as specified in §63.654(h) and (i). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

(2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

(d) The owner or operator shall establish a range that ensures compliance with the emissions standard for each parameter monitored under paragraphs (a) and (b) of this section. In order to establish the range, the information required in §63.654(f)(3) shall be submitted in the Notification of Compliance Status report.

(e) Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum and/or maximum operating parameter value or procedure required to be monitored under paragraphs (a) and (b) of this section. Operation of the control device in a manner that constitutes a period of excess emissions, as defined in §63.654(g)(6), or failure to perform procedures required by this section shall constitute a violation of the applicable emission standard of this subpart.

67. **40 CFR 63.645 Test methods and procedures for miscellaneous process vents.**

(a) To demonstrate compliance with §63.643, an owner or operator shall follow §63.116 except for §63.116(a)(1), (d) and (e) of subpart G of this part except as provided in paragraphs (b) through (d) and paragraph (i) of this section.

(b) All references to §63.113(a)(1) or (a)(2) in §63.116 of subpart G of this part shall be replaced with §63.643(a)(1) or (a)(2), respectively.

(c) In §63.116(c)(4)(ii)(C) of subpart G of this part, organic HAP's in the list of HAP's in table 1 of this subpart shall be considered instead of the organic HAP's in table 2 of subpart F of this part.

(d) All references to §63.116(b)(1) or (b)(2) shall be replaced with paragraphs (d)(1) and (d)(2) of this section, respectively.

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

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

(e) For purposes of determining the TOC emission rate, as specified under paragraph (f) of this section, 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.

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

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

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

(1) The sampling site shall be selected as specified in paragraph (e) of this section.

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

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

(i) 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.

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

$$C_{TOC} = \frac{\sum_{i=1}^{x}\left(\sum_{j=1}^{n} C_{ji}\right)}{X}$$

where:

C_{TOC}=Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.
C_{ji}=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.

(4) The emission rate of TOC (minus methane and ethane) (E_{TOC}) shall be calculated using the following equation if Method 18 is used:

$$E = K_2\left[\sum_{j=1}^{n} C_j M_j\right] Q_s$$

where:

E=Emission rate of TOC (minus methane and ethane) in the sample, kilograms per day.
K_2 = Constant, 5.986×10^{-5} (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (kilogram per gram) (minute per day), where the standard temperature (standard cubic meter) is at 20°C.
C_j=Concentration on a dry basis of organic compound j in parts per million as measured by Method 18 of 40 CFR part 60, appendix A, as indicated in paragraph (f)(3) of this section. C_j includes all organic compounds measured minus methane and ethane.
M_j=Molecular weight of organic compound j, gram per gram-mole.
Q_s=Vent stream flow rate, dry standard cubic meters per minute, at a temperature of 20°C.

(5) If Method 25A is used, the emission rate of TOC (E_{TOC}) shall be calculated using the following equation:

$$E_{TOC}=K_2C_{TOC}MQ_s$$

where:

E_{TOC}=Emission rate of TOC (minus methane and ethane) in the sample, kilograms per day.
K_2=Constant, 5.986×10^{-5} (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (kilogram per gram)(minute per day), where the standard temperature (standard cubic meter) is at 20°C.
C_{TOC}=Concentration of TOC on a dry basis in parts per million volume as measured by Method 25A of 40 CFR part 60, appendix A, as indicated in paragraph (f)(3) of this section.
M=Molecular weight of organic compound used to express units of C_{TOC}, gram per gram-mole.
Q_s=Vent stream flow rate, dry standard cubic meters per minute, at a temperature of 20°C.

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

(1) Engineering assessment includes, but is not limited to, the following:

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

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

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

(iv) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

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

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

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

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

(h) 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.

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

(2) 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.

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

68. **40 CFR 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 except as provided in paragraphs (b) through (l) 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 annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR part 60, appendix A shall be used.

(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 apply as specified in paragraphs (d)(1) through (d)(10) 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 Fshall be replaced with §63.640(h) through (m).

(5) All references to §63.150 in §63.119 of subpart G of this partshall 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)(ii) of subpart G are not applicable. For sources subject to this subpart, such references shall mean that 40 CFR 61.355 is applicable.

(10) All references to §63.139(c) in §63.120(d)(1)(ii) of subpart Gare not applicable. For sources subject to this subpart, such references shall mean that §63.647 of this subpart is applicable.

(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.

69. **40 CFR 63.647 Wastewater provisions.**

(a) Except as provided in paragraph (b) of this section, each owner or operator of a Group 1 wastewater stream shall comply with the requirements of §§61.340 through 61.355 of 40 CFR part 61, subpart FF for each process wastewater stream that meets the definition in §63.641.

(b) As used in this section, all terms not defined in §63.641 shall have the meaning given them in the Clean Air Act or in 40 CFR part 61, subpart FF, §61.341.

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

70. **40 CFR 63.648 Equipment leak standards.**

(a) Each owner or operator of an existing source subject to the provisions of this subpart shall comply with the provisions of 40 CFR Part 60, Subpart VV and paragraph (b) of this section except as provided in paragraphs (a)(1), (a)(2), and (c) through (i) of this section. Each owner or operator of a new source subject to the provisions of this subpart shall comply with subpart H of this part except as provided in paragraphs (c) through (i) of this section.

(1) For purposes of compliance with this section, the provisions of 40 CFR part 60, subpart VV apply only to equipment in organic HAP service, as defined in §63.641 of this subpart.

(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 sourcewide basis. Once the owner or operator has decided, all subsequent calculations shall be on the same basis unless a permit change is made.

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

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

(2) Departures from the criteria specified in §60.485(b) of 40 CFR Part 60, Subpart VV or §63.180(b)(1) through (b)(5) of subpart H of this part or from the monitoring frequency specified in subpart VV or in paragraph (c) of this section (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.

(c) In lieu of complying with the existing source provisions of paragraph (a) in this section, an owner or operator may elect to comply with the requirements of §§63.161 through 63.169, 63.171, 63.172, 63.175, 63.176, 63.177, 63.179, and 63.180 of subpart H of this part except as provided in paragraphs (c)(1) through (c)(10) and (e) through (i) of this section.

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

(2) In phase III of the valve standard, the owner or operator may monitor valves for leaks as specified in paragraphs (c)(2)(i) or (c)(2)(ii) of this section.

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

(ii) If an owner or operator elects to monitor connectors according to the provisions of §63.649, paragraphs (b), (c), or (d), then the owner or operator shall monitor valves at the frequencies specified in table 9 of this subpart.

(3) The owner or operator shall decide no later than the first required monitoring period after the phase I compliance date specified in §63.640(h) whether to calculate the percentage leaking valves on a process unit basis or on a sourcewide basis. Once the owner or operator has decided, all subsequent calculations shall be on the same basis unless a permit change is made.

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

(5) Connectors in gas/vapor service or light liquid service are subject to the requirements for connectors in heavy liquid service in §63.169 of subpart H of this part (except for the agitator provisions). The leak definition for valves, connectors, and instrumentation systems subject to §63.169 is 1,000 parts per million.

(6) In phase III of the pump standard, except as provided in paragraph (c)(7) of this section, owners or operators that achieve less than 10 percent of light liquid pumps leaking or three light liquid pumps leaking, whichever is greater, shall monitor light liquid pumps monthly.

(7) Owners or operators that achieve less than 3 percent of light liquid pumps leaking or one light liquid pump leaking, whichever is greater, shall monitor light liquid pumps quarterly.

(8) An owner or operator may make the election described in paragraphs (c)(3)and (c)(4) of this sectionat any time except that any election to change after the initial election shall be treated as a permit modification according to the terms of part 70 of this chapter.

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

(10) If in phase III of the valve standard any valve is designated as being leakless, the owner or operator has the option of following the provisions of 40 CFR 60.482-7(f). If an owner or operator chooses to comply with the provisions of 40 CFR 60.482-7(f), the valve is exempt from the valve monitoring provisions of §63.168 of subpart H of this part.

(d) Upon startup of new sources, the owner or operator shall comply with §63.163(a)(1)(ii) of subpart H of this part for light liquid pumps and §63.168(a)(1)(ii) of subpart H of this part for gas/vapor and light liquid valves.

(e) For reciprocating pumps in heavy liquid service and agitators in heavy liquid service, owners and operators are not required to comply with the requirements in §63.169 of subpart H of this part.

(f) Reciprocating pumps in light liquid service are exempt from §§63.163 and 60.482 if recasting the distance piece or reciprocating pump replacement is required.

(g) Compressors in hydrogen service are exempt from the requirements of paragraphs (a) and (c) of this section if an owner or operator demonstrates that a compressor is in hydrogen service.

(1) Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service.

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

(i) For purposes of determining the percentage hydrogen content in the process fluid that is contained in or contacts a compressor, the owner or operator shall use either:

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

(B) Engineering judgment to demonstrate that the percentage content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume.

(1) When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, the procedures in paragraph (g)(2)(i)(A) of this section shall be used to resolve the disagreement.

(2) If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only by following the procedures in paragraph (g)(2)(i)(A) of this section.

(h) Each owner or operator of a source subject to the provisions of this subpart must maintain all records for a minimum of 5 years.

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

71. **40 CFR 63.649 Alternative means of emission limitation: Connectors in gas/vapor service and light liquid service.**

(a) If an owner or operator elects to monitor valves according to the provisions of §63.648(c)(2)(ii), the owner or operator shall implement one of the connector monitoring programs specified in paragraphs (b), (c), or (d) of this section.

(b) *Random 200 connector alternative*. The owner or operator shall implement a random sampling program for accessible connectors of 2.0 inches nominal diameter or greater. The program does not apply to inaccessible or unsafe-to-monitor connectors, as defined in §63.174 of subpart H. The sampling program shall be implemented source-wide.

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

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

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

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

(5) After conducting the initial survey required in paragraph (b)(1) of this section, the owner or operator shall conduct subsequent monitoring of connectors at the frequencies specified in paragraphs (b)(5)(i) through (b)(5)(iv) of this section.

(i) If the percentage leaking connectors is 2.0 percent or greater, the owner or operator shall survey a random sample of 200 connectors once every 6 months.

(ii) If the percentage leaking connectors is 1.0 percent or greater but less than 2.0 percent, the owner or operator shall survey a random sample of 200 connectors once per year.

(iii) If the percentage leaking connectors is 0.5 percent or greater but less than 1.0 percent, the owner or operator shall survey a random sample of 200 connectors once every 2 years.

(iv) If the percentage leaking connectors is less than 0.5 percent, the owner or operator shall survey a random sample of 200 connectors once every 4 years.

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

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

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

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

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

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

(5) After conducting the initial survey required in paragraphs (c)(1) and (c)(2) of this section, the owner or operator shall conduct subsequent monitoring at the frequencies specified in paragraphs (c)(5)(i) through (c)(5)(iii) of this section.

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

(ii) If the percentage leaking connectors is 1.0 percent or greater but less than 2.0 percent, the owner or operator shall monitor or inspect, as applicable, the connectors once every 2 years.

(iii) If the percentage leaking connectors is less than 1.0 percent, the owner or operator shall monitor or inspect, as applicable, the connectors once every 4 years.

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

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

$$\% C_L=[(C_L-C_{AN}) /C_t+C_c)]\times 100$$

where:

$\% C_L$=Percentage leaking connectors.
C_L=Number of connectors including nonrepairables, measured at 1,000 parts per million or greater, by Method 21 of 40 CFR part 60, Appendix A.
C_{AN}=Number of allowable nonrepairable connectors, as determined by monitoring, not to exceed 3 percent of the total connector population, C_t.
C_t=Total number of monitored connectors, including nonrepairables, in the process unit.
C_c=Optional credit for removed connectors=0.67×net number (i.e., the total number of connectors removed minus the total added) of connectors in organic HAP service removed from the process unit after the

applicability date set forth in §63.640(h)(4)(iii) for existing process units, and after the date of start-up for new process units. If credits are not taken, then C_c=0.

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

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

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

(d) *Subpart H program*. The owner or operator shall implement a program to comply with the provisions in §63.174 of this part.

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

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

(2) Delay of repair for connectors is also allowed if:

(i) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and

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

(f) Any connector that is designated as an unsafe-to-repair connector is exempt from the requirements of paragraphs (b)(3) and (b)(4), (c)(3) and (c)(4), or (d) of this section if:

(1) The owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b)(3) and (b)(4), (c)(3) and (c)(4), of this section; or

(2) The connector will be repaired before the end of the next scheduled process unit shutdown.

(g) The owner or operator shall maintain records to document that the connector monitoring or inspections have been conducted as required and to document repair of leaking connectors as applicable.

72. **40 CFR 63.650 Gasoline loading rack provisions.**

(a) Except as provided in paragraphs (b) through (c) of this section, each owner or operator of a gasoline loading rack classified under Standard Industrial Classification code 2911 located within a contiguous area and under common control with a petroleum refinery shall comply with subpart R, §§63.421, 63.422(a) through (c), 63.425(a) through (c), 63.425(e) through (h), 63.427(a) and (b), and 63.428 (b), (c), (g)(1), and (h)(1) through (h)(3).

(b) As used in this section, all terms not defined in §63.641 shall have the meaning given them in subpart A or in 40 CFR part 63, subpart R. The §63.641 definition of "affected source" applies under this section.

(c) Gasoline loading racks regulated under this subpart are subject to the compliance dates specified in §63.640(h).

73. **40 CFR 63.651 Marine tank vessel loading operation provisions.**

(a) Except as provided in paragraphs (b) through (d) of this section, each owner or operator of a marine tank vessel loading operation located at a petroleum refinery shall comply with the requirements of §§63.560 through 63.567.

(b) As used in this section, all terms not defined in §63.641 shall have the meaning given them in subpart A or in 40 CFR part 63, subpart Y. The §63.641 definition of "affected source" applies under this section.

(c) The Initial Notification Report under §63.567(b) is not required.

(d) The compliance time of 4 years after promulgation of 40 CFR part 63, subpart Y does not apply. The compliance time is specified in §63.640(h)(3).

74. **40 CFR 63.652 Emissions averaging provisions.**

(a) This section applies to owners or operators of existing sources who seek to comply with the emission standard in §63.642(g) by using emissions averaging according to §63.642(l) rather than following the provisions of §§63.643 through 63.647, and §§63.650 and 63.651. Existing marine tank vessel loading operations unable to comply with the standard by using emissions averaging are those marine tank vessels subject to 40 CFR 63.562(e) of this part and the Valdez Marine Terminal source.

(b) The owner or operator shall develop and submit for approval an Implementation Plan containing all of the information required in §63.653(d) for all points to be included in an emissions average. The Implementation Plan shall identify all emission points to be included in the emissions average. This must include any Group 1 emission points to which the reference control technology (defined in §63.641) is not applied and all other emission points being controlled as part of the average.

(c) The following emission points can be used to generate emissions averaging credits if control was applied after November 15, 1990 and if sufficient information is available to determine the appropriate value of credits for the emission point:

(1) Group 2 emission points;

(2) Group 1 storage vessels, Group 1 wastewater streams, Group 1 gasoline loading racks, Group 1 marine tank vessels, and Group 1 miscellaneous process vents that are controlled by a technology that the Administrator or permitting authority agrees has a higher nominal efficiency than the reference control technology. Information on the nominal efficiencies for such technologies must be submitted and approved as provided in paragraph (i) of this section; and

(3) Emission points from which emissions are reduced by pollution prevention measures. Percentages of reduction for pollution prevention measures shall be determined as specified in paragraph (j) of this section.

(i) For a Group 1 emission point, the pollution prevention measure must reduce emissions more than the reference control technology would have had the reference control technology been applied to the emission point instead of the pollution prevention measure except as provided in paragraph (c)(3)(ii) of this section.

(ii) If a pollution prevention measure is used in conjunction with other controls for a Group 1 emission point, the pollution prevention measure alone does not have to reduce emissions more than the reference control technology, but the combination of the pollution prevention measure and other controls must reduce emissions more than the reference control technology would have had it been applied instead.

(d) The following emission points cannot be used to generate emissions averaging credits:

(1) Emission points already controlled on or before November 15, 1990 unless the level of control is increased after November 15, 1990, in which case credit will be allowed only for the increase in control after November 15, 1990;

(2) Group 1 emission points that are controlled by a reference control technology unless the reference control technology has been approved for use in a different manner and a higher nominal efficiency has been assigned according to the procedures in paragraph (i) of this section. For example, it is not allowable to claim that an internal floating roof meeting only the specifications stated in the reference control technology definition in §63.641 (i.e., that meets the specifications of §63.119(b) of subpart G but does not have controlled fittings per §63.119(b)(5) and (b)(6) of subpart G) applied to a storage vessel is achieving greater than 95 percent control;

(3) Emission points on shutdown process units. Process units that are shut down cannot be used to generate credits or debits;

(4) Wastewater that is not process wastewater or wastewater streams treated in biological treatment units. These two types of wastewater cannot be used to generate credits or debits. Group 1 wastewater streams cannot

be left undercontrolled or uncontrolled to generate debits. For the purposes of this section, the terms "wastewater" and "wastewater stream" are used to mean process wastewater; and

(5) Emission points controlled to comply with a State or Federal rule other than this subpart, unless the level of control has been increased after November 15, 1990 above what is required by the other State or Federal rule. Only the control above what is required by the other State or Federal rule will be credited. However, if an emission point has been used to generate emissions averaging credit in an approved emissions average, and the point is subsequently made subject to a State or Federal rule other than this subpart, the point can continue to generate emissions averaging credit for the purpose of complying with the previously approved average.

(e) For all points included in an emissions average, the owner or operator shall:

(1) Calculate and record monthly debits for all Group 1 emission points that are controlled to a level less stringent than the reference control technology for those emission points. Equations in paragraph (g) of this section shall be used to calculate debits.

(2) Calculate and record monthly credits for all Group 1 or Group 2 emission points that are overcontrolled to compensate for the debits. Equations in paragraph (h) of this section shall be used to calculate credits. Emission points and controls that meet the criteria of paragraph (c) of this section may be included in the credit calculation, whereas those described in paragraph (d) of this section shall not be included.

(3) Demonstrate that annual credits calculated according to paragraph (h) of this section are greater than or equal to debits calculated for the same annual compliance period according to paragraph (g) of this section.

(i) The initial demonstration in the Implementation Plan that credit-generating emission points will be capable of generating sufficient credits to offset the debits from the debit-generating emission points must be made under representative operating conditions.

(ii) After the compliance date, actual operating data will be used for all debit and credit calculations.

(4) Demonstrate that debits calculated for a quarterly (3-month) period according to paragraph (g) of this section are not more than 1.30 times the credits for the same period calculated according to paragraph (h) of this section. Compliance for the quarter shall be determined based on the ratio of credits and debits from that quarter, with 30 percent more debits than credits allowed on a quarterly basis.

(5) Record and report quarterly and annual credits and debits in the Periodic Reports as specified in §63.654(g)(8). Every fourth Periodic Report shall include a certification of compliance with the emissions averaging provisions as required by §63.654(g)(8)(iii).

(f) Debits and credits shall be calculated in accordance with the methods and procedures specified in paragraphs (g) and (h) of this section, respectively, and shall not include emissions from the following:

(1) More than 20 individual emission points. Where pollution prevention measures (as specified in paragraph (j)(1) of this section) are used to control emission points to be included in an emissions average, no more than 25 emission points may be included in the average. For example, if two emission points to be included in an emissions average are controlled by pollution prevention measures, the average may include up to 22 emission points.

(2) Periods of startup, shutdown, and malfunction as described in the source's startup, shutdown, and malfunction plan required by §63.6(e)(3) of subpart A of this part.

(3) For emission points for which continuous monitors are used, periods of excess emissions as defined in §63.654(g)(6)(i). For these periods, the calculation of monthly credits and debits shall be adjusted as specified in paragraphs (f)(3)(i) through (f)(3)(iii) of this section.

(i) No credits would be assigned to the credit-generating emission point.

(ii) Maximum debits would be assigned to the debit-generating emission point.

(iii) The owner or operator may use the procedures in paragraph (l) of this sectionto demonstrate to the Administrator that full or partial credits or debits should be assigned.

(g) Debits are generated by the difference between the actual emissions from a Group 1 emission point that is uncontrolled or is controlled to a level less stringent than the reference control technology, and the emissions allowed for Group 1 emission point. Debits shall be calculated as follows:

(1) The overall equation for calculating sourcewide debits is:

$$Debits = \sum_{i=1}^{n}\left(EPV_{iACTUAL} - (0.02)\,EPV_{iu}\right) + \sum_{i=1}^{n}\left(ES_{iACTUAL} - (0.05)\,ES_{iu}\right) + \sum_{i=1}^{n}\left(EGLR_{iACTUAL} - EGLR_{iC}\right) + \sum_{i=1}^{n}\left(EMV_{iACTUAL} - (0.03)\,EMViu\right)$$

where:

Debits and all terms of the equation are in units of megagrams per month, and
$EPV_{iACTUAL}$=Emissions from each Group 1 miscellaneous process vent i that is uncontrolled or is controlled to a level less stringent than the reference control technology. This is calculated according to paragraph (g)(2) of this section.
(0.02) EPV_{iu}=Emissions from each Group 1 miscellaneous process vent i if the reference control technology had been applied to the uncontrolled emissions, calculated according to paragraph (g)(2) of this section.
$ES_{iACTUAL}$=Emissions from each Group 1 storage vessel i that is uncontrolled or is controlled to a level less stringent than the reference control technology. This is calculated according to paragraph (g)(3) of this section.
(0.05) ES_{iu}=Emissions from each Group 1 storage vessel i if the reference control technology had been applied to the uncontrolled emissions, calculated according to paragraph (g)(3) of this section.
$EGLR_{iACTUAL}$=Emissions from each Group 1 gasoline loading rack i that is uncontrolled or is controlled to a level less stringent than the reference control technology. This is calculated according to paragraph (g)(4) of this section.
$EGLR_{ic}$=Emissions from each Group 1 gasoline loading rack i if the reference control technology had been applied to the uncontrolled emissions. This is calculated according to paragraph (g)(4) of this section.
EMV_{ACTUAL}=Emissions from each Group 1 marine tank vessel i that is uncontrolled or is controlled to a level less stringent than the reference control technology. This is calculated according to paragraph (g)(5) of this section.
(0.03) EMV_{iu}=Emissions from each Group 1 marine tank vessel i if the reference control technology had been applied to the uncontrolled emissions calculated according to paragraph (g)(5) of this section.
n=The number of Group 1 emission points being included in the emissions average. The value of n is not necessarily the same for each kind of emission point.

(2) Emissions from miscellaneous process vents shall be calculated as follows:

(i) For purposes of determining miscellaneous process vent stream flow rate, organic HAP concentrations, and temperature, the sampling site shall be after the final product recovery device, if any re covery devices are present; before any control device (for miscellaneous process vents, recovery devices shall not be considered control devices); and before discharge to the atmosphere. Method 1 or 1A of part 60, appendix A shall be used for selection of the sampling site.

(ii) The following equation shall be used for each miscellaneous process vent i to calculate EPV_{iu}:

$$EPV_{iu} = \left(2.494\times10^{-9}\right)Qh\left(\sum_{j=1}^{n}C_jM_j\right)$$

where:

EPV_{iu}=Uncontrolled process vent emission rate from miscellaneous process vent i, megagrams per month.
Q=Vent stream flow rate, dry standard cubic meters per minute, measured using Methods 2, 2A, 2C, or 2D of part 60 appendix A, as appropriate.
h=Monthly hours of operation during which positive flow is present in the vent, hours per month.

C_j=Concentration, parts per million by volume, dry basis, of organic HAP j as measured by Method 18 of part 60 appendix A.
M_j=Molecular weight of organic HAP j, gram per gram-mole.
n=Number of organic HAP's in the miscellaneous process vent stream.

(A) The values of Q, C_j, and M_j shall be determined during a performance test conducted under representative operating conditions. The values of Q, C_j, and M_j shall be established in the Notification of Compliance Status report and must be updated as provided in paragraph (g)(2)(ii)(B) of this section.

(B) If there is a change in capacity utilization other than a change in monthly operating hours, or if any other change is made to the process or product recovery equipment or operation such that the previously measured values of Q, C_j, and M_j are no longer representative, a new performance test shall be conducted to determine new representative values of Q, C_j, and M_j. These new values shall be used to calculate debits and credits from the time of the change forward, and the new values shall be reported in the next Periodic Report.

(iii) The following procedures and equations shall be used to calculate $EPV_{iACTUAL}$:

(A) If the vent is not controlled by a control device or pollution prevention measure, $EPV_{iACTUAL}$ = EPV_{iu}, where EPV_{iu} is calculated according to the procedures in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(B) If the vent is controlled using a control device or a pollution prevention measure achieving less than 98-percent reduction,

$$EPV_{iACTUAL} = EPV_{iu} \times \left(1 - \frac{Percent\ reduction}{100\%}\right)$$

(1) The percent reduction shall be measured according to the procedures in §63.116 of subpart G if a combustion control device is used. For a flare meeting the criteria in §63.116(a) of subpart G, or a boiler or process heater meeting the criteria in §63.645(d) of this subpart or §63.116(b) of subpart G, the percentage of reduction shall be 98 percent. If a noncombustion control device is used, percentage of reduction shall be demonstrated by a performance test at the inlet and outlet of the device, or, if testing is not feasible, by a control design evaluation and documented engineering calculations.

(2) For determining debits from miscellaneous process vents, product recovery devices shall not be considered control devices and cannot be assigned a percentage of reduction in calculating $EPV_{iACTUAL}$. The sampling site for measurement of uncontrolled emissions is after the final product recovery device.

(3) Procedures for calculating the percentage of reduction of pollution prevention measures are specified in paragraph (j) of this section.

(3) Emissions from storage vessels shall be calculated as specified in §63.150(g)(3) of subpart G.

(4) Emissions from gasoline loading racks shall be calculated as follows:

(i) The following equation shall be used for each gasoline loading rack i to calculate $EGLR_{iu}$:

$$EGLR_{iu} = \left(1.20 \times 10^{-7}\right) \frac{SPMG}{T}$$

where:

$EGLR_{iu}$=Uncontrolled transfer HAP emission rate from gasoline loading rack i, megagrams per month
S=Saturation factor, dimensionless (see table 33 of subpart G).
P=Weighted average rack partial pressure of organic HAP's transferred at the rack during the month, kilopascals.
M=Weighted average molecular weight of organic HAP's transferred at the gasoline loading rack during the month, gram per gram-mole.

G=Monthly volume of gasoline transferred from gasoline loading rack, liters per month.
T=Weighted rack bulk liquid loading temperature during the month, degrees kelvin (degrees Celsius °C + 273).

(ii) The following equation shall be used for each gasoline loading rack i to calculate the weighted average rack partial pressure:

$$P = \frac{\sum_{1}^{j=n} (P_j)(G_j)}{G}$$

where:

P_j=Maximum true vapor pressure of individual organic HAP transferred at the rack, kilopascals.
G=Monthly volume of organic HAP transferred, liters per month, and

$$G = \sum_{1}^{j=n} G_j$$

G_j=Monthly volume of individual organic HAP transferred at the gasoline loading rack, liters per month.
n=Number of organic HAP's transferred at the gasoline loading rack.

(iii) The following equation shall be used for each gasoline loading rack i to calculate the weighted average rack molecular weight:

$$M = \frac{\sum_{1}^{j=n} (M_j)(G_j)}{G}$$

where:

M_j=Molecular weight of individual organic HAP transferred at the rack, gram per gram-mole.
G, G_j, and n are as defined in paragraph (g)(4)(ii) of this section.
(iv) The following equation shall be used for each gasoline loading rack i to calculate the monthly weighted rack bulk liquid loading temperature:

$$T = \frac{\sum_{1}^{j=n} (T_j)(G_j)}{G}$$

T_j=Average annual bulk temperature of individual organic HAP loaded at the gasoline loading rack, kelvin (degrees Celsius °C+273).
G, G_j, and n are as defined in paragraph (g)(4)(ii) of this section.

(v) The following equation shall be used to calculate $EGLR_{ic}$:

$$EGLR_{ic} = 1 \times 10^{-8}\, G$$

G is as defined in paragraph (g)(4)(ii) of this section.

(vi) The following procedures and equations shall be used to calculate $EGLR_{iACTUAL}$:

(A) If the gasoline loading rack is not controlled, $EGLR_{iACTUAL}=EGLR_{iu}$, where $EGLR_{iu}$ is calculated using the equations specified in paragraphs (g)(4)(i) through (g)(4)(iv) of this section.

(B) If the gasoline loading rack is controlled using a control device or a pollution prevention measure not achieving the requirement of less than 10 milligrams of TOC per liter of gasoline loaded,

$$EGLR_{iACTUAL} = EGLR_{iu}\left(\frac{1 - Percent\ reduction}{100\%}\right)$$

(1) The percent reduction for a control device shall be measured according to the procedures and test methods specified in §63.128(a) of subpart G. If testing is not feasible, the percentage of reduction shall be determined through a design evaluation according to the procedures specified in §63.128(h) of subpart G.

(2) Procedures for calculating the percentage of reduction for pollution prevention measures are specified in paragraph (j) of this section.

(5) Emissions from marine tank vessel loading shall be calculated as follows:

(i) The following equation shall be used for each marine tank vessel i to calculate EMV_{iu}:

$$EMV_{iu} = \sum_{i=1}^{m}(Q_i)(F_i)(P_i)$$

where:

EMV_{iu}=Uncontrolled marine tank vessel HAP emission rate from marine tank vessel i, megagrams per month.
Q_i=Quantity of commodity loaded (per vessel type), liters.
F_i=Emission factor, megagrams per liter.
P_i=Percent HAP.
m=Number of combinations of commodities and vessel types loaded.
Emission factors shall be based on test data or emission estimation procedures specified in §63.565(l) of subpart Y.

(ii) The following procedures and equations shall be used to calculate $EMV_{iACTUAL}$:

(A) If the marine tank vessel is not controlled, $EMV_{iACTUAL}=EMV_{iu}$, where EMV_{iu} is calculated using the equations specified in paragraph (g)(5)(i) of this section.

(B) If the marine tank vessel is controlled using a control device or a pollution prevention measure achieving less than 97-percent reduction,

$$EMV_{iACTUAL} = EMV_{iu}\left(\frac{1 - Percent\ reduction}{100\%}\right)$$

(1) The percent reduction for a control device shall be measured according to the procedures and test methods specified in §63.565(c) of subpart Y. If testing is not feasible, the percentage of reduction shall be determined through a design evaluation according to the procedures specified in §63.128(h) of subpart G.

(2) Procedures for calculating the percentage of reduction for pollution prevention measures are specified in paragraph (j) of this section.

(h) Credits are generated by the difference between emissions that are allowed for each Group 1 and Group 2 emission point and the actual emissions from a Group 1 or Group 2 emission point that has been controlled after November 15, 1990 to a level more stringent than what is required by this subpart or any other State or Federal rule or statute. Credits shall be calculated as follows:

(1) The overall equation for calculating sourcewide credits is:

$$
\begin{aligned}
Credits = {} & D\sum_{i=1}^{n}\left((0.02)\ \mathrm{EPV1}_{iu} - EPV1_{iACTUAL}\right) + D\sum_{i=1}^{m}\left(EPV2_{iBASE} - EPV2_{iACTUAL}\right) + \\
& D\sum_{i=1}^{n}\left((0.05)\ \mathrm{ES1}_{iu} - ES1_{iACTUAL}\right) + D\sum_{i=1}^{m}\left(ES2_{iBASE} - ES2_{iACTUAL}\right) + \\
& D\sum_{i=1}^{n}\left(\mathrm{EGLR}_{ic} - EGLRl_{iACTUAL}\right) + D\sum_{i=1}^{m}\left(EGLR2_{iBASE} - EGLR2_{iACTUAL}\right) + \\
& D\sum_{i=1}^{n}\left((0.03)\ \mathrm{EMV1}_{iu} - EMV1_{iACTUAL}\right) + D\sum_{i=1}^{m}\left(EMV2_{iBASE} - EMV2_{iACTUAL}\right) + \\
& D\sum_{i=1}^{n}\left(\mathrm{EWW1}_{ic} - EWW1_{iACTUAL}\right) + D\sum_{i=1}^{m}\left(EWW2_{iBASE} - EWW2_{iACTUAL}\right)
\end{aligned}
$$

where:

Credits and all terms of the equation are in units of megagrams per month, the baseline date is November 15, 1990, and
D=Discount factor=0.9 for all credit-generating emission points except those controlled by a pollution prevention measure, which will not be discounted.
$EPV1_{iACTUAL}$=Emissions for each Group 1 miscellaneous process vent i that is controlled to a level more stringent than the reference control technology, calculated according to paragraph (h)(2) of this section.
(0.02) $EPV1_{iu}$=Emissions from each Group 1 miscellaneous process vent i if the reference control technology had been applied to the uncontrolled emissions. $EPV1_{iu}$ is calculated according to paragraph (h)(2) of this section.
$EPV2_{iBASE}$=Emissions from each Group 2 miscellaneous process vent; at the baseline date, as calculated in paragraph (h)(2) of this section.
$EPV2_{iACTUAL}$=Emissions from each Group 2 miscellaneous process vent that is controlled, calculated according to paragraph (h)(2) of this section.
$ES1_{iACTUAL}$=Emissions from each Group 1 storage vessel i that is controlled to a level more stringent than the reference control technology, calculated according to paragraph (h)(3) of this section.
(0.05) $ES1_{iu}$=Emissions from each Group 1 storage vessel i if the reference control technology had been applied to the uncontrolled emissions. $ES1_{iu}$ is calculated according to paragraph (h)(3) of this section.
$ES2_{iACTUAL}$=Emissions from each Group 2 storage vessel i that is controlled, calculated according to paragraph (h)(3) of this section.
$ES2_{iBASE}$=Emissions from each Group 2 storage vessel i at the baseline date, as calculated in paragraph (h)(3) of this section.
$EGLR1_{iACTUAL}$=Emissions from each Group 1 gasoline loading rack i that is controlled to a level more stringent than the reference control technology, calculated according to paragraph (h)(4) of this section.
$EGLR_{ic}$=Emissions from each Group 1 gasoline loading rack i if the reference control technology had been applied to the uncontrolled emissions. $EGLR_{iu}$ is calculated according to paragraph (h)(4) of this section.
$EGRL2_{iACTUAL}$=Emissions from each Group 2 gasoline loading rack i that is controlled, calculated according to paragraph (h)(4) of this section.
$EGLR2_{iBASE}$=Emissions from each Group 2 gasoline loading rack i at the baseline date, as calculated in paragraph (h)(4) of this section.
$EMV1_{iACTUAL}$=Emissions from each Group 1 marine tank vessel i that is controlled to a level more stringent than the reference control technology, calculated according to paragraph (h)(4) of this section.

(0.03)$EMV1_{iu}$=Emissions from each Group 1 marine tank vessel i if the reference control technology had been applied to the uncontrolled emissions. $EMV1_{iu}$ is calculated according to paragraph (h)(5) of this section.
$EMV2_{iACTUAL}$=Emissions from each Group 2 marine tank vessel i that is controlled, calculated according to paragraph (h)(5) of this section.
$EMV2_{iBASE}$=Emissions from each Group 2 marine tank vessel i at the baseline date, as calculated in paragraph (h)(5) of this section.
$EWW1_{iACTUAL}$=Emissions from each Group 1 wastewater stream i that is controlled to a level more stringent than the reference control technology, calculated according to paragraph (h)(6) of this section.
$EWW1_{ic}$=Emissions from each Group 1 wastewater stream i if the reference control technology had been applied to the uncontrolled emissions, calculated according to paragraph (h)(6) of this section.
$EWW2_{iACTUAL}$=Emissions from each Group 2 wastewater stream i that is controlled, calculated according to paragraph (h)(6) of this section.
$EWW2_{iBASE}$=Emissions from each Group 2 wastewater stream i at the baseline date, calculated according to paragraph (h)(6) of this section.
n=Number of Group 1 emission points included in the emissions average. The value of n is not necessarily the same for each kind of emission point.
m=Number of Group 2 emission points included in the emissions average. The value of m is not necessarily the same for each kind of emission point.

(i) For an emission point controlled using a reference control technology, the percentage of reduction for calculating credits shall be no greater than the nominal efficiency associated with the reference control technology, unless a higher nominal efficiency is assigned as specified in paragraph (h)(1)(ii) of this section.

(ii) For an emission point controlled to a level more stringent than the reference control technology, the nominal efficiency for calculating credits shall be assigned as described in paragraph (i) of this section. A reference control technology may be approved for use in a different manner and assigned a higher nominal efficiency according to the procedures in paragraph (i) of this section.

(iii) For an emission point controlled using a pollution prevention measure, the nominal efficiency for calculating credits shall be determined as described in paragraph (j) of this section.

(2) Emissions from process vents shall be determined as follows:

(i) Uncontrolled emissions from miscellaneous process vents, $EPV1_{iu}$, shall be calculated according to the procedures and equation for EPV_{iu} in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(ii) Actual emissions from miscellaneous process vents controlled using a technology with an approved nominal efficiency greater than 98 percent or a pollution prevention measure achieving greater than 98 percent emission reduction, $EPV1_{iACTUAL}$, shall be calculated according to the following equation:

$$EPV1_{iACTUAL} = EPV1_{iu}\left(1 - \frac{Nominal\ efficiency\%}{100\%}\right)$$

(iii) The following procedures shall be used to calculate actual emissions from Group 2 process vents, $EPV2_{iACTUAL}$:

(A) For a Group 2 process vent controlled by a control device, a recovery device applied as a pollution prevention project, or a pollution prevention measure, if the control achieves a percentage of reduction less than or equal to a 98 percent reduction,

$$EPV2_{iACTUAL} = EPV2_{iu} \times \left(1 - \frac{Percent\ reduction}{100\%}\right)$$

(1) $EPV2_{iu}$ shall be calculated according to the equations and procedures for EPV_{iu} in paragraphs (g)(2)(i) and (g)(2)(ii) of this section except as provided in paragraph (h)(2)(iii)(A)(*3*) of this section.

(2) The percentage of reduction shall be calculated according to the procedures in paragraphs (g)(2)(iii)(B)(*1*) through (g)(2)(iii)(B)(*3*) of this section except as provided in paragraph (h)(2)(iii)(A)(*4*) of this section.

(3) If a recovery device was added as part of a pollution prevention project, $EPV2_{iu}$ shall be calculated prior to that recovery device. The equation for EPV_{iu} in paragraph (g)(2)(ii) of this sectionshall be used to calculate $EPV2_{iu}$; however, the sampling site for measurement of vent stream flow rate and organic HAP concentration shall be at the inlet of the recovery device.

(4) If a recovery device was added as part of a pollution prevention project, the percentage of reduction shall be demonstrated by conducting a performance test at the inlet and outlet of that recovery device.

(B) For a Group 2 process vent controlled using a technology with an approved nominal efficiency greater than a 98 percent or a pollution prevention measure achieving greater than 98 percent reduction,

(iv) Emissions from Group 2 process vents at baseline, $EPV2_{iBASE}$, shall be calculated as follows:

(A) If the process vent was uncontrolled on November 15, 1990, $EPV2_{iBASE}=EPV2_{iu}$, and shall be calculated according to the procedures and equation for EPV_{iu} in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(B) If the process vent was controlled on November 15, 1990,

$$EPV2_{iACTUAL} = EPV2_{iu}\left(1 - \frac{Nominal\ efficiency\ \%}{100\%}\right)$$

where $EPV2_{iu}$ is calculated according to the procedures and equation for EPV_{iu} in paragraphs (g)(2)(i) and (g)(2)(ii) of this section. The percentage of reduction shall be calculated according to the procedures specified in paragraphs (g)(2)(iii)(B)(*1*) through (g)(2)(iii)(B)(*3*) of this section.

(C) If a recovery device was added to a process vent as part of a pollution prevention project initiated after November 15, 1990, $EPV2_{iBASE}=EPV2_{iu}$, where $EPV2_{iu}$ is calculated according to paragraph (h)(2)(iii)(A)(*3*) of this section.

(3) Emissions from storage vessels shall be determined as specified in §63.150(h)(3) of subpart G, except as follows:

(i) All references to 63.119(b) in §63.150(h)(3) of subpart Gshall be replaced with: §63.119(b) or §63.119(b) except for §63.119(b)(5) and (b)(6).

(ii) All references to §63.119(c) in §63.150(h)(3) of subpart Gshall be replaced with: §63.119(c) or §63.119(c) except for §63.119(c)(2).

(iii) All references to §63.119(d) in §63.150(h)(3) of subpart Gshall be replaced with: §63.119(d) or §63.119(d) except for §63.119(d)(2).

(4) Emissions from gasoline loading racks shall be determined as follows:

(i) Uncontrolled emissions from Group 1 gasoline loading racks, $EGLR1_{iu}$, shall be calculated according to the procedures and equations for $EGLR_{iu}$ as described in paragraphs (g)(4)(i) through (g)(4)(iv) of this section.

(ii) Emissions from Group 1 gasoline loading racks if the reference control technology had been applied, $EGLR_{ic}$, shall be calculated according to the procedures and equations in paragraph (g)(4)(v) of this section.

(iii) Actual emissions from Group 1 gasoline loading racks controlled to less than 10 milligrams of TOC per liter of gasoline loaded; $EGLR_{iACTUAL}$, shall be calculated according to the following equation:

$$EGLR1_{iACTUAL} = EGLR1_{iu}\left(1 - \frac{Nominal\ efficiency}{100\%}\right)$$

(iv) The following procedures shall be used to calculate actual emissions from Group 2 gasoline loading racks, $EGLR2_{iACTUAL}$:

(A) For a Group 2 gasoline loading rack controlled by a control device or a pollution prevention measure achieving emissions reduction but where emissions are greater than the 10 milligrams of TOC per liter of gasoline loaded requirement,

$$EGLR2_{iACTUAL} = EGLR2_{iu}\left(1 - \frac{Percent\ \text{reduction}}{100\%}\right)$$

(1) $EGLR2_{iu}$ shall be calculated according to the equations and procedures for $EGLR_{iu}$ in paragraphs (g)(4)(i) through (g)(4)(iv) of this section.

(2) The percentage of reduction shall be calculated according to the procedures in paragraphs (g)(4)(vi)(B)(*1*) and (g)(4)(vi)(B)(*2*) of this section.

(B) For a Group 2 gasoline loading rack controlled by using a technology with an approved nominal efficiency greater than 98 percent or a pollution prevention measure achieving greater than a 98-percent reduction,

$$EGLR2_{iACTUAL} = EGLR2_{iu}\left(1 - \frac{\text{Nominal efficiency}}{100\%}\right)$$

(v) Emissions from Group 2 gasoline loading racks at baseline, $EGLR2_{iBASE}$, shall be calculated as follows:

(A) If the gasoline loading rack was uncontrolled on November 15, 1990, $EGLR2_{iBASE}$=$EGLR2_{iu}$, and shall be calculated according to the procedures and equations for $EGLR_{iu}$ in paragraphs (g)(4)(i) through (g)(4)(iv) of this section.

(B) If the gasoline loading rack was controlled on November 15, 1990,

$$EGLR2_{iBASE} = EGLR2_{iu}\left(1 - \frac{Percent\ \text{reduction}}{100\%}\right)$$

where $EGLR2_{iu}$ is calculated according to the procedures and equations for $EGLR_{iu}$ in paragraphs (g)(4)(i) through (g)(4)(iv) of this section. Percentage of reduction shall be calculated according to the procedures in paragraphs (g)(4)(vi)(B)(*1*) and (g)(4)(vi)(B)(*2* of this section.

(5) Emissions from marine tank vessels shall be determined as follows:

(i) Uncontrolled emissions from Group 1 marine tank vessels, $EMV1_{iu}$, shall be calculated according to the procedures and equations for EMV_{iu} as described in paragraph (g)(5)(i) of this section.

(ii) Actual emissions from Group 1 marine tank vessels controlled using a technology or pollution prevention measure with an approved nominal efficiency greater than 97 percent, $EMV_{iACTUAL}$, shall be calculated according to the following equation:

$$EMV1_{iACTUAL} = EMV1_{iu}\left(1 - \frac{\text{Nominal efficiency}}{100\%}\right)$$

(iii) The following procedures shall be used to calculate actual emissions from Group 2 marine tank vessels, $EMV2_{iACTUAL}$:

(A) For a Group 2 marine tank vessel controlled by a control device or a pollution prevention measure achieving a percentage of reduction less than or equal to 97 percent reduction,

$$EMV2_{iACTUAL} = EMV2_{iu}\left(1 - \frac{Percent\ \text{reduction}}{100\%}\right)$$

(1) $EMV2_{iu}$ shall be calculated according to the equations and procedures for EMV_{iu} in paragraph (g)(5)(i) of this section.

(2) The percentage of reduction shall be calculated according to the procedures in paragraphs (g)(5)(ii)(B)(*1*) and (g)(5)(ii)(B)(*2*) of this section.

(B) For a Group 2 marine tank vessel controlled using a technology or a pollution prevention measure with an approved nominal efficiency greater than 97 percent,

$$EMV2_{iACTUAL} = EMV2_{iu}\left(1 - \frac{\text{Nominal efficiency}}{100\%}\right)$$

(iv) Emissions from Group 2 marine tank vessels at baseline, $EMV2_{iBASE}$, shall be calculated as follows:

(A) If the marine terminal was uncontrolled on November 15, 1990, $EMV2_{iBASE}$ equals $EMV2_{iu}$, and shall be calculated according to the procedures and equations for EMV_{iu} in paragraph (g)(5)(i) of this section.

(B) If the marine tank vessel was controlled on November 15, 1990,

$$EMV2_{iBASE} = EMV2_{iu}\left(1 - \frac{Percent\ \text{reduction}}{100\%}\right)$$

where $EMV2_{iu}$ is calculated according to the procedures and equations for EMV_{iu} in paragraph (g)(5)(i) of this section. Percentage of reduction shall be calculated according to the procedures in paragraphs (g)(5)(ii)(B)(*1*) and (g)(5)(ii)(B)(*2*) of this section.

(6) Emissions from wastewater shall be determined as follows:

(i) For purposes of paragraphs (h)(4)(ii) through (h)(4)(vi) of this section, the following terms will have the meaning given them in paragraphs (h)(6)(i)(A) through (h)(6)(i)(C) of this section.

(A) *Correctly suppressed* means that a wastewater stream is being managed according to the requirements of §§61.343 through 61.347 or §61.342(c)(l)(iii) of 40 CFR part 61, subpart FF, as applicable, and the emissions from the waste management units subject to those requirements are routed to a control device that reduces HAP emissions by 95 percent or greater.

(B) *Treatment process* has the meaning given in §61.341 of 40 CFR part 61, subpart FF except that it does not include biological treatment units.

(C) *Vapor control device* means the control device that receives emissions vented from a treatment process or treatment processes.

(ii) The following equation shall be used for each wastewater stream i to calculate EWW_{ic}:

$$EWW_{ic} = \left(6.0*10^{-8}\right)Q_i\,H_i\sum_{m=1}^{s}\left(1 - Fr_m\right)Fe_m HAP_{im} + \left(0.05\right)\left(6.0*10^{-8}\right)Q_i\,H_i\sum_{m=1}^{s}\left(Fr_m HAP_{im}\right)$$

where:

EWW_{ic} = Monthly wastewater stream emission rate if wastewater stream i were controlled by the reference control technology, megagrams per month.
Q_i = Average flow rate for wastewater stream i, liters per minute.
H_i = Number of hours during the month that wastewater stream i was generated, hours per month.
Fr_m=Fraction removed of organic HAP m in wastewater, from table 7 of this subpart, dimensionless.
Fe_m=Fraction emitted of organic HAP m in wastewater from table 7 of this subpart, dimensionless.
s=Total number of organic HAP's in wastewater stream i.
HAP_{im}=Average concentration of organic HAP m in wastewater stream i, parts per million by weight.

(A) HAP_{im} shall be determined for the point of generation or at a location downstream of the point of generation. Wastewater samples shall be collected using the sampling procedures specified in Method 25D of 40 CFR part 60, appendix A. Where feasible, samples shall be taken from an enclosed pipe prior to the wastewater being exposed to the atmosphere. 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 organic HAP's prior to sampling. The samples collected may be analyzed by either of the following procedures:

(1) A test method or results from a test method that measures organic HAP concentrations in the wastewater, and that has been validated pursuant to section 5.1 or 5.3 of Method 301 of appendix A of this part may be used; or

(2) Method 305 of appendix A of this part may be used to determine C_{im}, the average volatile organic HAP concentration of organic HAP m in wastewater stream i, and then HAP_{im} may be calculated using the following equation: $HAP_{im}=C_{im}/Fm_m$, where Fm_m for organic HAP m is obtained from table 7 of this subpart.

(B) Values for Q_i, HAP_{im}, and C_{im} shall be determined during a performance test conducted under representative conditions. The average value obtained from three test runs shall be used. The values of Q_i, HAP_{im}, and C_{im} shall be established in the Notification of Compliance Status report and must be updated as provided in paragraph (h)(6)(i)(C) of this section.

(C) If there is a change to the process or operation such that the previously measured values of Q_i, HAP_{im}, and C_{im} are no longer representative, a new performance test shall be conducted to determine new representative values of Q_i, HAP_{im}, and C_{im}. These new values shall be used to calculate debits and credits from the time of the change forward, and the new values shall be reported in the next Periodic Report.

(iii) The following equations shall be used to calculate $EWW1_{iACTUAL}$ for each Group 1 wastewater stream i that is correctly suppressed and is treated to a level more stringent than the reference control technology.

(A) If the Group 1 wastewater stream i is controlled using a treatment process or series of treatment processes with an approved nominal reduction efficiency for an individually speciated HAP that is greater than that specified in table 7 of this subpart, and the vapor control device achieves a percentage of reduction equal to 95 percent, the following equation shall be used:

$$EWW_{ic} = \left(6.0*10^{-8}\right) Q_i H_i \sum_{m=1}^{5} \left(1 - Fr_m\right) Fe_m HAP_{im} + \left(0.05\right)\left(6.0*10^{-8}\right) Q_i H_i \sum_{m=1}^{5} \left(Fr_m HAP_{im}\right)$$

Where:

$EWW_{iACTUAL}$=Monthly wastewater stream emission rate if wastewater stream i is treated to a level more stringent than the reference control technology, megagrams per month.
PR_{im}=The efficiency of the treatment process, or series of treatment processes, that treat wastewater stream i in reducing the emission potential of organic HAP m in wastewater, dimensionless, as calculated by:

$$PR_{im} = \frac{HAP_{im\text{-}in} - HAP_{im\text{-}out}}{HAP_{im\text{-}in}}$$

Where:

$HAP_{im\text{-}in}$=Average concentration of organic HAP m, parts per million by weight, as defined and determined according to paragraph (h)(6)(ii)(A) of this section, in the wastewater entering the first treatment process in the series.

$HAP_{im\text{-}out}$=Average concentration of organic HAP m, parts per million by weight, as defined and determined according to paragraph (h)(6)(ii)(A) of this section, in the wastewater exiting the last treatment process in the series.
All other terms are as defined and determined in paragraph (h)(6)(ii) of this section.

(B) If the Group 1 wastewater stream i is not controlled using a treatment process or series of treatment processes with an approved nominal reduction efficiency for an individually speciated HAP that is greater than that specified in table 7 of this subpart, but the vapor control device has an approved nominal efficiency greater than 95 percent, the following equation shall be used:

$$EWW1_{iACTUAL} = \left(6.0*10^{-8}\right) Q_i\, H_i \sum_{m=1}^{s} \left[Fe_m HAP_{im} \left(1 - A_m\right)\right] + \left(1 - \frac{\text{Nominal efficiency \%}}{100}\right)\left(6.0*10^{-8}\right) Q_i\, H_i \sum_{m=1}^{s} \left[HAP_{im} A_m\right]$$

Where:

Nominal efficiency=Approved reduction efficiency of the vapor control device, dimensionless, as determined according to the procedures in §63.652(i).
A_m=The efficiency of the treatment process, or series of treatment processes, that treat wastewater stream i in reducing the emission potential of organic HAP m in wastewater, dimensionless.
All other terms are as defined and determined in paragraphs (h)(6)(ii) and (h)(6)(iii)(A) of this section.

(1) If a steam stripper meeting the specifications in the definition of reference control technology for wastewater is used, A_m shall be equal to the value of Fr_m given in table 7 of this subpart.

(2) If an alternative control device is used, the percentage of reduction must be determined using the equation and methods specified in paragraph (h)(6)(iii)(A) of this section for determining PR_{im}. If the value of PR_{im} is greater than or equal to the value of Fr_m given in table 7 of this subpart, then A_m equals Fr_m unless a higher nominal efficiency has been approved. If a higher nominal efficiency has been approved for the treatment process, the owner or operator shall determine $EWW1_{iACTUAL}$ according to paragraph (h)(6)(iii)(B) of this section rather than paragraph (h)(6)(iii)(A) of this section. If PR_{im} is less than the value of FR_m given in table 7 of this subpart, emissions averaging shall not be used for this emission point.

(C) If the Group 1 wastewater stream i is controlled using a treatment process or series of treatment processes with an approved nominal reduction efficiency for an individually speciated hazardous air pollutant that is greater than that specified in table 7 of this subpart, and the vapor control device has an approved nominal efficiency greater than 95 percent, the following equation shall be used:

$$EWW1_{iACTUAL} = \left(6.0*10^{-8}\right) Q_i H_i \sum_{m=1}^{s} \left[Fe_m HAP_{im} \left(1 - PR_{im}\right)\right] + \left(1 - \frac{\text{Nominal efficiency \%}}{100}\right)\left(6.0*10^{-8}\right) Q_i\, H_i \sum_{m=1}^{s} \left[HAP_{im} PR_{im}\right]$$

where all terms are as defined and determined in paragraphs (h)(6)(ii) and (h)(6)(iii)(A) of this section.

(iv) The following equation shall be used to calculate $EWW2_{iBASE}$ for each Group 2 wastewater stream i that on November 15, 1990 was not correctly suppressed or was correctly suppressed but not treated:

$$EWW2_{iBASE} = \left(6.0 \times 10^{-8}\right) Q_i\, H_i \sum_{m=1}^{s} Fe_m HAP_{im}$$

Where:

$EWW2_{iBASE}$=Monthly wastewater stream emission rate if wastewater stream i is not correctly suppressed, megagrams per month.
Q_i, H_i, s, Fe_m, and $HAP_{im}$are as defined and determined according to paragraphs (h)(6)(ii) and (h)(6)(iii)(A) of this section.

(v) The following equation shall be used to calculate $EWW2_{iBASE}$ for each Group 2 wastewater stream i on November 15, 1990 was correctly suppressed. $EWW2_{iBASE}$ shall be calculated as if the control methods being used on November 15, 1990 are in place and any control methods applied after November 15, 1990 are ignored. However, values for the parameters in the equation shall be representative of present production levels and stream properties.

$$EWW2_{iBASE} = (6.0 \times 10^{-8})Q_iH_i \sum_{m=1}^{s} [Fe_m HAP_{im}(1-PR_{im})] + [1-(Ri/100\%)](6.0 \times 10^{-8})Q_iH_i \sum_{m=1}^{s} [HAP_{im}PR_{im}]$$

where R_i is calculated according to paragraph (h)(6)(vii) of this section and all other terms are as defined and determined according to paragraphs (h)(6)(ii) and (h)(6)(iii)(A) of this section.

(vi) For Group 2 wastewater streams that are correctly suppressed, $EWW2_{iACTUAL}$ shall be calculated ac cording to the equation for $EWW2_{iBASE}$ in paragraph (h)(6)(v) of this section. $EWW2_{iACTUAL}$ shall be calculated with all control methods in place accounted for.

(vii) The reduction efficiency, R_i, of the vapor control device shall be demonstrated according to the following procedures:

(A) Sampling sites shall be selected using Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate.

(B) The mass flow rate of organic compounds entering and exiting the control device shall be determined as follows:

(1) The time period for the test shall not be less than 3 hours during which at least three runs are conducted.

(2) A run shall consist of a 1-hour period during the test. For each run:

(*i*) The volume exhausted shall be determined using Methods 2, 2A, 2C, or 2D of 40 CFR part 60 appendix A, as appropriate;

(*ii*) The organic concentration in the vent stream entering and exiting the control device shall be determined using Method 18 of 40 CFR part 60, appendix A. Alternatively, any other test method validated according to the procedures in Method 301 of appendix A of this part may be used.

(3) The mass flow rate of organic compounds entering and exiting the control device during each run shall be calculated as follows:

$$E_a = \frac{0.0416}{10^6 \times m}\left[\sum_{p=1}^{m} V_{ap}\left(\sum_{p=1}^{n} C_{aip} MW_i\right)\right]$$

$$E_b = \frac{0.0416}{10^6 \times m}\left[\sum_{p=1}^{m} V_{bp}\left(\sum_{p=1}^{n} C_{bip} MW_i\right)\right]$$

Where:

E_a=Mass flow rate of organic compounds exiting the control device, kilograms per hour.
E_b=Mass flow rate of organic compounds entering the control device, kilograms per hour.
V_{ap}=Average volumetric flow rate of vent stream exiting the control device during run p at standards conditions, cubic meters per hour.
V_{bp} = Average volumetric flow rate of vent stream entering the control device during run p at standards conditions, cubic meters per hour.
p = Run.
m = Number of runs.

C_{aip} = Concentration of organic compound i measured in the vent stream exiting the control device during run p as determined by Method 18 of 40 CFR part 60 appendix A, parts per million by volume on a dry basis.
C_{bip} = Concentration of organic compound i measured in the vent stream entering the control device during run p as determined by Method 18 of 40 CFR part 60, appendix A, parts per million by volume on a dry basis.
MW_i = Molecular weight of organic compound i in the vent stream, kilograms per kilogram-mole.
n = Number of organic compounds in the vent stream.
0.0416 = Conversion factor for molar volume, kilograms-mole per cubic meter at 293 kelvin and 760 millimeters mercury absolute.

(C) The organic reduction efficiency for the control device shall be calculated as follows:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

Where:

R = Total organic reduction efficiency for the control device, percentage.
E_b = Mass flow rate of organic compounds entering the control device, kilograms per hour.
E_a = Mass flow rate of organic compounds exiting the control device, kilograms per hour.

(i) The following procedures shall be followed to establish nominal efficiencies. The procedures in paragraphs (i)(1) through (i)(6) of this section shall be followed for control technologies that are different in use or design from the reference control technologies and achieve greater percentages of reduction than the percentages of efficiency assigned to the reference control technologies in §63.641.

(1) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from the reference control technology, and the different control technology will be used in more than three applications at a single plant site, the owner or operator shall submit the information specified in paragraphs (i)(1)(i) through (i)(1)(iv) of this section to the Administrator in writing:

(i) Emission stream characteristics of each emission point to which the control technology is or will be applied including the kind of emission point, flow, organic HAP concentration, and all other stream characteristics necessary to design the control technology or determine its performance;

(ii) Description of the control technology including design specifications;

(iii) Documentation demonstrating to the Administrator's satisfaction the control efficiency of the control technology. This may include performance test data collected using an appropriate EPA method or any other method validated according to Method 301 of appendix A of this part. If it is infeasible to obtain test data, documentation may include a design evaluation and calculations. The engineering basis of the calculation procedures and all inputs and assumptions made in the calculations shall be documented; and

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

(2) The Administrator shall determine within 120 calendar days whether an application presents sufficient information to determine nominal efficiency. The Administrator reserves the right to request specific data in addition to the items listed in paragraph (i)(1) of this section.

(3) The Administrator shall determine within 120 calendar days of the submittal of sufficient data whether a control technology shall have a nominal efficiency and the level of that nominal efficiency. If, in the Administrator's judgment, the control technology achieves a level of emission reduction greater than the reference control technology for a particular kind of emission point, the Administrator will publish a **Federal Register** notice establishing a nominal efficiency for the control technology.

(4) The Administrator may grant conditional permission to take emission credits for use of the control technology on requirements that may be necessary to ensure operation and maintenance to achieve the specified nominal efficiency.

(5) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from the reference control technology and the different control technology will be used in no more than three applications at a single plant site, the information listed in paragraphs (i)(1)(i) through (i)(1)(iv) of this section can be submitted to the permitting authority for the source for approval instead of the Administrator.

(i) In these instances, use and conditions for use of the control technology can be approved by the permitting authority. The permitting authority shall follow the procedures specified in paragraphs (i)(2) through (i)(4) of this section except that, in these instances, a **Federal Register** notice is not required to establish the nominal efficiency for the different technology.

(ii) If, in reviewing the submittal, the permitting authority believes the control technology has broad applicability for use by other sources, the permitting authority shall submit the information provided in the application to the Director of the EPA Office of Air Quality Planning and Standards. The Administrator shall review the technology for broad applicability and may publish a **Federal Register** notice; however, this review shall not affect the permitting authority's approval of the nominal efficiency of the control technology for the specific application.

(6) If, in reviewing an application for a control technology for an emission point, the Administrator or permitting authority determines the control technology is not different in use or design from the reference control technology, the Administrator or permitting authority shall deny the application.

(j) The following procedures shall be used for calculating the efficiency (percentage of reduction) of pollution prevention measures:

(1) A pollution prevention measure is any practice that meets the criteria of paragraphs (j)(1)(i) and (j)(1)(ii) of this section.

(i) A pollution prevention measure is any practice that results in a lesser quantity of organic HAP emissions per unit of product released to the atmosphere prior to out-of-process recycling, treatment, or control of emissions while the same product is produced.

(ii) Pollution prevention measures may include: Substitution of feedstocks that reduce HAP emissions, alterations to the production process to reduce the volume of materials released to the environment, equipment modifications; housekeeping measures, and in-process recycling that returns waste materials directly to production as raw materials. Production cutbacks do not qualify as pollution prevention.

(2) The emission reduction efficiency of pollution prevention measures implemented after November 15, 1990 can be used in calculating the actual emissions from an emission point in the debit and credit equations in paragraphs (g) and (h) of this section.

(i) For pollution prevention measures, the percentage of reduction used in the equations in paragraphs (g)(2) and (g)(3) of this section and paragraphs (h)(2) through (h)(4) of this section is the difference in percentage between the monthly organic HAP emissions for each emission point after the pollution prevention measure for the most recent month versus monthly emissions from the same emission point before the pollution prevention measure, adjusted by the volume of product produced during the two monthly periods.

(ii) The following equation shall be used to calculate the percentage of reduction of a pollution prevention measure for each emission point.

$$\text{Percent reduction} = \frac{E_B \frac{\left(E_{pp} \times P_B\right)}{P_{pp}}}{E_B} \times 100\%$$

Where:

Percent reduction=Efficiency of pollution prevention measure (percentage of organic HAP reduction).
E_B=Monthly emissions before the pollution prevention measure, megagrams per month, determined as specified in paragraphs (j)(2)(ii)(A), (j)(2)(ii)(B), and (j)(2)(ii)(C) of this section.

E_{pp}=Monthly emissions after the pollution prevention measure, megagrams per month, as determined for the most recent month, determined as specified in paragraphs (j)(2)(ii)(D) or (j)(2)(ii)(E) of this section.
P_B=Monthly production before the pollution prevention measure, megagrams per month, during the same period over which E_B is calculated.
P_{pp}=Monthly production after the pollution prevention measure, megagrams per month, as determined for the most recent month.

(A) The monthly emissions before the pollution prevention measure, E_B, shall be determined in a manner consistent with the equations and procedures in paragraphs (g)(2), (g)(3), (g)(4), and (g)(5) of this section for miscellaneous process vents, storage vessels, gasoline loading racks, and marine tank vessels.

(B) For wastewater, E_B shall be calculated as follows:

$$E_B = \sum_{i=1}^{n} \left[\left(6.0*10^{-8}\right) Q_{Bi}\, H_{Bi} \sum_{m=1}^{s} Fe_m HAP_{Bim} \right]$$

where:

n=Number of wastewater streams.
Q_{Bi}=Average flow rate for wastewater stream i before the pollution prevention measure, liters per minute.
H_{Bi}=Number of hours per month that wastewater stream i was discharged before the pollution prevention measure, hours per month.
s=Total number of organic HAP's in wastewater stream i.
Fe_m=Fraction emitted of organic HAP m in wastewater from table 7 of this subpart, dimensionless.
HAP_{Bim}=Average concentration of organic HAP m in wastewater stream i, defined and determined according to paragraph (h)(6)(ii)(A)(*2*) of this section, before the pollution prevention measure, parts per million by weight, as measured before the im plementation of the pollution measure.

(C) If the pollution prevention measure was implemented prior to July 14, 1994, records may be used to determine E_B.

(D) The monthly emissions after the pollution prevention measure, E_{pp}, may be determined during a performance test or by a design evaluation and documented engineering calculations. Once an emissions-to-production ratio has been established, the ratio can be used to estimate monthly emissions from monthly production records.

(E) For wastewater, E_{pp} shall be calculated using the following equation:

$$E_{pp} = \sum_{i=1}^{n} \left[\left(6.0*10^{-8}\right) Q_{ppi}\, H_{ppi} \sum_{m=1}^{s} Fe_m HAP_{ppim} \right]$$

where n, Q, H, s, Fe_m, and HAP are defined and determined as described in paragraph (j)(2)(ii)(B) of this section except that Q_{ppi}, H_{ppi}, and HAP_{ppim} shall be determined after the pollution prevention measure has been implemented.

(iii) All equations, calculations, test procedures, test results, and other information used to determine the percentage of reduction achieved by a pollution prevention measure for each emission point shall be fully documented.

(iv) The same pollution prevention measure may reduce emissions from multiple emission points. In such cases, the percentage of reduction in emissions for each emission point must be calculated.

(v) For the purposes of the equations in paragraphs (h)(2) through (h)(6) of this section used to calculate credits for emission points controlled more stringently than the reference control technology, the nominal efficiency of a pollution prevention measure is equivalent to the percentage of reduction of the pollution

prevention measure. When a pollution prevention measure is used, the owner or operator of a source is not required to apply to the Administrator for a nominal efficiency and is not subject to paragraph (i) of this section.

(k) The owner or operator shall demonstrate that the emissions from the emission points proposed to be included in the average will not result in greater hazard or, at the option of the State or local permitting authority, greater risk to human health or the environment than if the emission points were controlled according to the provisions in §§63.643 through 63.647, and §§63.650 and 63.651.

(1) This demonstration of hazard or risk equivalency shall be made to the satisfaction of the State or local permitting authority.

(i) The State or local permitting authority may require owners and operators to use specific methodologies and procedures for making a hazard or risk determination.

(ii) The demonstration and approval of hazard or risk equivalency may be made according to any guidance that the EPA makes available for use.

(2) Owners and operators shall provide documentation demonstrating the hazard or risk equivalency of their proposed emissions average in their Implementation Plan.

(3) An emissions averaging plan that does not demonstrate an equivalent or lower hazard or risk to the satisfaction of the State or local permitting authority shall not be approved. The State or local permitting authority may require such adjustments to the emissions averaging plan as are necessary in order to ensure that the average will not result in greater hazard or risk to human health or the environment than would result if the emission points were controlled according to §§63.643 through 63.647, and §§63.650 and 63.651.

(4) A hazard or risk equivalency demonstration shall:

(i) Be a quantitative, bona fide chemical hazard or risk assessment;

(ii) Account for differences in chemical hazard or risk to human health or the environment; and

(iii) Meet any requirements set by the State or local permitting authority for such demonstrations.

(l) For periods of excess emissions, an owner or operator may request that the provisions of paragraphs (l)(1) through (l)(4) of this section be followed instead of the procedures in paragraphs (f)(3)(i) and (f)(3)(ii) of this section.

(1) The owner or operator shall notify the Administrator of excess emissions in the Periodic Reports as required in §63.654(g)(6).

(2) The owner or operator shall demonstrate that other types of monitoring data or engineering calculations are appropriate to establish that the control device for the emission point was operating in such a fashion to warrant assigning full or partial credits and debits. This demonstration shall be made to the Administrator's satisfaction, and the Administrator may establish procedures for demonstrating compliance that are acceptable.

(3) The owner or operator shall provide documentation of the period of excess emissions and the other type of monitoring data or engineering calculations to be used to demonstrate that the control device for the emission point was operating in such a fashion to warrant assigning full or partial credits and debits.

(4) The Administrator may assign full or partial credit and debits upon review of the information provided.

75. **40 CFR 63.653 Monitoring, record keeping, and implementation plan for emission averaging.**

(a) For each emission point included in an emissions average, the owner or operator shall perform testing, monitoring, record keeping, and reporting equivalent to that required for Group 1 emission points complying with §§63.643 through 63.647, and §§63.650 and 63.651. The specific requirements for miscellaneous process vents, storage vessels, wastewater, gasoline loading racks, and marine tank vessels are identified in paragraphs (a)(1) through (a)(7) of this section.

(1) The source shall implement the following testing, monitoring, record keeping, and reporting procedures for each miscellaneous process vent equipped with a flare, incinerator, boiler, or process heater:

(i) Conduct initial performance tests to determine the percentage of reduction as specified in §63.645 of this subpart and §63.116 of subpart G; and

(ii) Monitor the operating parameters specified in §63.644, as appropriate for the specific control device.

(2) The source shall implement the following procedures for each miscellaneous process vent, equipped with a carbon adsorber, absorber, or condenser but not equipped with a control device:

(i) Determine the flow rate and organic HAP concentration using the methods specified in §63.115(a)(1) and (a)(2), §63.115(b)(1) and (b)(2), and §63.115(c)(3) of subpart G; and

(ii) Monitor the operating parameters specified in §63.114 of subpart G, as appropriate for the specific recovery device.

(3) The source shall implement the following procedures for each storage vessel controlled with an internal floating roof, external roof, or a closed vent system with a control device, as appropriate to the control technique:

(i) Perform the monitoring or inspection procedures in §63.646 of this subpart and §63.120 of subpart G; and

(ii) For closed vent systems with control devices, conduct an initial design evaluation as specified in §63.646 of this subpartand §63.120(d) of subpart G.

(4) For each gasoline loading rack that is controlled, perform the testing and monitoring procedures specified in §§63.425 and 63.427 of subpart R of this part except §63.425(d) or §63.427(c).

(5) For each marine tank vessel that is controlled, perform the compliance, monitoring, and performance testing, procedures specified in §§63.563, 63.564, and 63.565 of subpart Y of this part.

(6) The source shall implement the following procedures for wastewater emission points, as appropriate to the control techniques:

(i) For wastewater treatment processes, conduct tests as specified in §61.355 of subpart FF of part 60;

(ii) Conduct inspections and monitoring as specified in §§61.343 through 61.349 and §61.354 of 40 CFR part 61, subpart FF.

(7) If an emission point in an emissions average is controlled using a pollution prevention measure or a device or technique for which no monitoring parameters or inspection procedures are specified in §§63.643 through 63.647 and §§63.650 and 63.651, the owner or operator shall establish a site-specific monitoring parameter and shall submit the information specified in §63.654(h)(4) in the Implementation Plan.

(b) Records of all information required to calculate emission debits and credits and records required by §63.654 shall be retained for 5 years.

(c) Notifications of Compliance Status report, Periodic Reports, and other reports shall be submitted as required by §63.654.

(d) Each owner or operator of an existing source who elects to comply with §63.654(g) and (h) by using emissions averaging for any emission points shall submit an Implementation Plan.

(1) The Implementation Plan shall be submitted to the Administrator and approved prior to implementing emissions averaging. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, in a Notification of Compliance Status Report, in a Periodic Report or in any combination of these documents. If an owner or operator submits the information specified in paragraph (d)(2) of this section at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating the previously submitted information.

(2) The Implementation Plan shall include the information specified in paragraphs (d)(2)(i) through (d)(2)(ix) of this section for all points included in the average.

(i) The identification of all emission points in the planned emissions average and notation of whether each emission point is a Group 1 or Group 2 emission point as defined in §63.641.

(ii) The projected annual emission debits and credits for each emission point and the sum for the emission points involved in the average calculated according to §63.652. The annual projected credits must be greater than the projected debits, as required under §63.652(e)(3).

(iii) The specific control technology or pollution prevention measure that will be used for each emission point included in the average and date of application or expected date of application.

(iv) The specific identification of each emission point affected by a pollution prevention measure. To be considered a pollution prevention measure, the criteria in §63.652(j)(1) must be met. If the same pollution

prevention measure reduces or eliminates emissions from multiple emission points in the average, the owner or operator must identify each of these emission points.

(v) A statement that the compliance demonstration, monitoring, inspection, record keeping, and reporting provisions in paragraphs (a), (b), and (c) of this section that are applicable to each emission point in the emissions average will be implemented beginning on the date of compliance.

(vi) Documentation of the information listed in paragraphs (d)(2)(vi)(A) through (d)(2)(vi)(D) of this section for each emission point included in the average.

(A) The values of the parameters used to determine whether each emission point in the emissions average is Group 1 or Group 2.

(B) The estimated values of all parameters needed for input to the emission debit and credit calculations in §63.652(g) and (h). These parameter values or, as appropriate, limited ranges for the parameter values, shall be specified in the source's Implementation Plan as enforceable operating conditions. Changes to these parameters must be reported in the next Periodic Report.

(C) The estimated percentage of reduction if a control technology achieving a lower percentage of reduction than the efficiency of the reference control technology, as defined in §63.641, is or will be applied to the emission point.

(D) The anticipated nominal efficiency if a control technology achieving a greater percentage emission reduction than the efficiency of the reference control technology is or will be applied to the emission point. The procedures in §63.652(i) shall be followed to apply for a nominal efficiency.

(vii) The information specified in §63.654(h)(4) for:

(A) Each miscellaneous process vent controlled by a pollution prevention measure or control technique for which monitoring parameters or inspection procedures are not specified in paragraphs (a)(1)or (a)(2) of this section; and

(B) Each storage vessel controlled by a pollution prevention measure or a control technique other than an internal or external floating roof or a closed vent system with a control device.

(viii) Documentation of the information listed in paragraphs (d)(2)(viii)(A) through (d)(2)(viii)(G) of this section for each process wastewater stream included in the average.

(A) The information used to determine whether the wastewater stream is a Group 1 or Group 2 wastewater stream.

(B) The estimated values of all parameters needed for input to the wastewater emission credit and debit calculations in §63.652(h)(6).

(C) The estimated percentage of reduction if the wastewater stream is or will be controlled using a treatment process or series of treatment processes that achieves an emission reduction less than or equal to the emission reduction specified in table 7 of this subpart.

(D) The estimated percentage of reduction if a control technology achieving less than or equal to 95 percent emission reduction is or will be applied to the vapor stream(s) vented and collected from the treatment processes.

(E) The estimated percentage of reduction if a pollution prevention measure is or will be applied.

(F) The anticipated nominal efficiency if the owner or operator plans to apply for a nominal efficiency under §63.652(i). A nominal efficiency shall be applied for if:

(1) A control technology is or will be applied to the wastewater stream and achieves an emission reduction greater than the emission reduction specified in table 7 of this subpart; or

(2) A control technology achieving greater than 95 percent emission reduction is or will be applied to the vapor stream(s) vented and collected from the treatment processes.

(G) For each pollution prevention measure, treatment process, or control device used to reduce air emissions of organic HAP's from wastewater and for which no monitoring parameters or inspection procedures are specified in §63.647, the information specified in §63.654(h)(4) shall be included in the Implementation Plan.

(ix) Documentation required in §63.652(k) demonstrating the hazard or risk equivalency of the proposed emissions average.

(3) The Administrator shall determine within 120 calendar days whether the Implementation Plan submitted presents sufficient information. The Administrator shall either approve the Implementation Plan, request changes, or request that the owner or operator submit additional information. Once the Administrator receives sufficient information, the Administrator shall approve, disapprove, or request changes to the plan within 120 calendar days.

76. **40 CFR 63.654 Reporting and record keeping requirements.**

(a) Each owner or operator subject to the wastewater provisions in §63.647 shall comply with the record keeping and reporting provisions in §§61.356 and 61.357 of 40 CFR part 61, subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of §63.640. There are no additional reporting and record keeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average. Record keeping and reporting for emissions averages are specified in §63.653 and in paragraphs (f)(5) and (g)(8) of this section.

(b) Each owner or operator subject to the gasoline loading rack provisions in §63.650 shall comply with the record keeping and reporting provisions in §63.428(b) and (c), (g)(1), and (h)(1) through (h)(3) of subpart R of this part. These requirements are summarized in table 4 of this subpart. There are no additional reporting and record keeping requirements for gasoline loading racks under this subpart unless a loading rack is included in an emissions average. Record keeping and reporting for emissions averages are specified in §63.653 and in paragraphs (f)(5) and (g)(8) of this section.

(c) Each owner or operator subject to the marine tank vessel loading operation standards in §63.651 shall comply with the record keeping and reporting provisions in §§63.566 and 63.567(a) and §63.567(c) through (i) of subpart Y of this part. These requirements are summarized in table 5 of this subpart. There are no additional reporting and record keeping requirements for marine tank vessel loading operations under this subpart unless marine tank vessel loading operations are included in an emissions average. Record keeping and reporting for emissions averages are specified in §63.653 and in paragraphs (f)(5) and (g)(8) of this section.

(d) Each owner or operator subject to the equipment leaks standards in §63.648 shall comply with the record keeping and reporting provisions in paragraphs (d)(1) through (d)(6) of this section.

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

(i) The signature of the owner or operator (or designate) whose decision it was that a repair could not be effected without a process shutdown is not required to be recorded. Instead, the name of the person whose decision it was that a repair could not be effected without a process shutdown shall be recorded and retained for 2 years.

(ii) [Reserved]

(2) The Notification of Compliance Status report required by §63.182(c) of subpart H and the initial semiannual report required by §60.487(b) of 40 CFR part 60, subpart VV shall be submitted within 150 days of the compliance date specified in §63.640(h); the requirements of subpart H of this part are summarized in table 3 of this subpart.

(3) An owner or operator who determines that a compressor qualifies for the hydrogen service exemption in §63.648 shall also keep a record of the demonstration required by §63.648.

(4) An owner or operator must keep a list of identification numbers for valves that are designated as leakless per §63.648(c)(10).

(5) An owner or operator must identify, either by list or location (area or refining process unit), equipment in organic HAP service less than 300 hours per year within refining process units subject to this subpart.

(6) An owner or operator must keep a list of reciprocating pumps and compressors determined to be exempt from seal requirements as per §§63.648(f) and (i).

(e) Each owner or operator of a source subject to this subpart shall submit the reports listed in paragraphs (e)(1) through (e)(3) of this section except as provided in paragraph (h)(5) of this section, and shall keep records as described in paragraph (i) of this section.

(1) A Notification of Compliance Status report as described in paragraph (f) of this section;

(2) Periodic Reports as described in paragraph (g) of this section; and

(3) Other reports as described in paragraph (h) of this section.

(f) Each owner or operator of a source subject to this subpart shall submit a Notification of Compliance Status report within 150 days after the compliance dates specified in §63.640(h) with the exception of Notification of Compliance Status reports submitted to comply with §63.640(l)(3) and for storage vessels subject to the compliance schedule specified in §63.640(h)(4). Notification of Compliance Status reports required by §63.640(l)(3) and for storage vessels subject to the compliance dates specified in §63.640(h)(4) shall be submitted according to paragraph (f)(6) of this section. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three. If the required information has been submitted before the date 150 days after the compliance date specified in §63.640(h), a separate Notification of Compliance Status report is not required within 150 days after the compliance dates specified in §63.640(h). If an owner or operator submits the information specified in paragraphs (f)(1) through (f)(5) of this section at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information. Each owner or operator of a gasoline loading rack classified under Standard Industrial Classification Code 2911 located within a contiguous area and under common control with a petroleum refinery subject to the standards of this subpart shall submit the Notification of Compliance Status report required by subpart R of this part within 150 days after the compliance dates specified in §63.640(h) of this subpart.

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

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

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

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

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

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

(B) If a closed vent system and a control device other than a flare is used to comply with §63.646 the owner or operator shall submit:

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

(2) The design evaluation documentation specified in §63.120(d)(1)(i) of subpart G, if the owner or operator elects to prepare a design evaluation; or

(3) If the owner or operator elects to submit the results of a performance test, identification of the storage vessel and control device for which the performance test will be submitted, and identification of the emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted.

(C) If a closed vent system and control device other than a flare is used, the owner or operator shall submit:

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

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

(D) If a closed vent system and a flare is used, the owner or operator shall submit:

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

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

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

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

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

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

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

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

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

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

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

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

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

(ii) A complete test report shall include a sampling site description, descrip tion 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.

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

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

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

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

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

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

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

(4) Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status report.

(5) For emission points included in an emissions average, the Notification of Compliance Status report shall include the values of the parameters needed for input to the emission credit and debit equations in §63.652(g) and (h), calculated or measured according to the procedures in §63.652(g) and (h), and the resulting credits and debits for the first quarter of the year. The first quarter begins on the compliance date specified in §63.640.

(6) Notification of Compliance Status reports required by §63.640(l)(3) and for storage vessels subject to the compliance dates specified in §63.640(h)(4) shall be submitted no later than 60 days after the end of the 6-month period during which the change or addition was made that resulted in the Group 1 emission point or the existing Group 1 storage vessel was brought into compliance, and may be combined with the periodic report. Six-month periods shall be the same 6-month periods specified in paragraph (g) of this section. The Notification of Compliance Status report shall include the information specified in paragraphs (f)(1) through (f)(5) of this section. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, as part of the periodic report, or in any combination of these four. If the required information has been submitted before the date 60 days after the end of the 6-month period in which the addition of the Group 1 emission point took place, a separate Notification of Compliance Status report is not required within 60 days after the end of the 6-month period. If an owner or operator submits the information specified in paragraphs (f)(1) through (f)(5) of this section at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information.

(g) The owner or operator of a source subject to this subpart shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs (g)(1) through (g)(6) of this section occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. A Periodic Report is not required if none of the compliance exceptions specified in paragraphs (g)(1) through (g)(6) of this section occurred during the 6-month period unless emissions averaging is utilized. Quarterly reports must be submitted for emission points included in emissions averages, as provided in paragraph (g)(8) of this section. An owner or operator may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs (g)(1) through (g)(8) of this section.

(1) For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph (g)(2) through (g)(5) of this section except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

(2) An owner or operator who elects to comply with §63.646 by using a fixed roof and an internal floating roof or by using an external floating roof converted to an internal floating roof shall submit the results of each inspection conducted in accordance with §63.120(a) of subpart G of this part in which a failure is detected in the control equipment.

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

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

(B) Except as provided in paragraph (g)(2)(i)(C) of 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.

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

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

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

(B) Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

(3) An owner or operator who elects to comply with §63.646 by using an external floating roof shall meet the periodic reporting requirements specified in paragraphs (g)(3)(i) through (g)(3)(iii) of this section.

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

(A) The date of the seal gap measurement.

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

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

(D) A description of the nature of and date the repair was made, or the date the storage vessel was emptied.

(ii) If an extension is utilized in accordance with §63.120(b)(7)(ii) or (b)(8) of subpart G of this part, 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 subpart G of this part, as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

(iii) The owner or operator shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by §63.120(b)(10) of subpart G of this part. This documentation shall meet the specifications and requirements in paragraphs (g)(3)(iii)(A) and (g)(3)(iii)(B) of this section.

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

(B) Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

(4) An owner or operator who elects to comply with §63.646 by using an external floating roof converted to an internal floating roof shall comply with the periodic reporting requirements of paragraph (g)(2) of this section.

(5) An owner or operator who elects to comply with §63.646 by installing a closed vent system and control device shall submit, as part of the next Periodic Report, the information specified in paragraphs (g)(5)(i) through (g)(5)(iii) of this section.

(i) The Periodic Report shall include the information specified in paragraphs (g)(5)(i)(A) and (g)(5)(i)(B) 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 subpart G of this part, as applicable.

(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §63.119(e)(1) or (e)(2) of subpart G of this part, as applicable, due to planned routine maintenance.

(ii) If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status report. The description shall include: Identification of the control device for which the measured parameters were outside of the established ranges, and causes for the measured parameters to be outside of the established ranges.

(iii) 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: Identification of the flare that does not meet the general requirements specified in §63.11(b) of subpart A of this part, and reasons the flare did not meet the general requirements specified in §63.11(b) of subpart A of this part.

(6) For miscellaneous process vents for which continuous parameter monitors are required by this subpart, periods of excess emissions shall be identified in the Period ic Reports and shall be used to determine compliance with the emission standards.

(i) Period of excess emission means any of the following conditions:

(A) An operating day when the daily average value of a monitored parameter, except presence of a flare pilot flame, is outside the range specified in the Notification of Compliance Status report. Monitoring data recorded during periods of monitoring system breakdown, repairs, calibration checks and zero (low-level) and high-level adjustments shall not be used in computing daily average values of monitored parameters.

(B) An operating day when all pilot flames of a flare are absent.

(C) An operating day when monitoring data required to be recorded in paragraphs (i)(3) (i) and (ii) of this section are available for less than 75 percent of the operating hours.

(D) For data compression systems approved under paragraph (h)(5)(iii) of this section, an operating day when the monitor operated for less than 75 percent of the operating hours or a day when less than 18 monitoring values were recorded.

(ii) For miscellaneous process vents, excess emissions shall be reported for the operating parameters specified in table 10 of this subpart unless other site-specific parameter(s) have been approved by the operating permit authority.

(iii) Periods of startup and shutdown that meet the definition of §63.641, and malfunction that meet the definition in §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.

(7) If a performance test for determination of compliance for a new emission point subject to this subpart or for an emission point that has changed from Group 2 to Group 1 is conducted during the period covered by a Periodic Report, the results of the performance test shall be included in the Periodic Report.

(i) Results of the performance test shall include the percentage of emissions reduction or outlet pollutant concentration reduction (whichever is needed to determine compliance) and the values of the monitored operating parameters.

(ii) The complete test report shall be maintained onsite.

(8) The owner or operator of a source shall submit quarterly reports for all emission points included in an emissions average.

(i) The quarterly reports shall be submitted no later than 60 calendar days after the end of each quarter. The first report shall be submitted with the Notification of Compliance Status report no later than 150 days after the compliance date specified in §63.640.

(ii) The quarterly reports shall include:

(A) The information specified in this paragraph and in paragraphs (g)(2) through (g)(7) of this section for all storage vessels and miscellaneous process vents included in an emissions average;

(B) The information required to be reported by §63.428(h)(1), (h)(2), and (h)(3) for each gasoline loading rack included in an emissions average, unless this information has already been submitted in a separate report;

(C) The information required to be included in quarterly reports by §§63.567(f) and 63.567(i)(2) of subpart Y of this part for each marine tank vessel loading operation included in an emissions average, unless the information has already been submitted in a separate report;

(D) Any information pertaining to each wastewater stream included in an emissions average that the source is required to report under the Implementation Plan for the source;

(E) The credits and debits calculated each month during the quarter;

(F) A demonstration that debits calculated for the quarter are not more than 1.30 times the credits calculated for the quarter, as required under §§63.652(e)(4);

(G) The values of any inputs to the credit and debit equations in §63.652(g) and (h) that change from month to month during the quarter or that have changed since the previous quarter; and

(H) Any other information the source is required to report under the Implementation Plan for the source.

(iii) Every fourth quarterly report shall include the following:

(A) A demonstration that annual credits are greater than or equal to annual debits as required by §63.652(e)(3); and

(B) A certification of compliance with all the emissions averaging provisions in §63.652 of this subpart.

(h) Other reports shall be submitted as specified in subpart A of this partand as follows:

(1) Reports of startup, shutdown, and malfunction required by §63.10(d)(5). Records and reports of startup, shutdown, and malfunction are not required if they pertain solely to Group 2 emission points, as defined

in §63.641, that are not included in an emissions average. For purposes of this paragraph, startup and shutdown shall have the meaning defined in §63.641, and malfunction shall have the meaning defined in §63.2; and

(2) For storage vessels, notifications of inspections as specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this section;

(i) 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 each Group 1 storage vessel that has been emptied and degassed.

(A) Except as provided in paragraphs (h)(2)(i) (B) and (C) 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's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

(B) Except as provided in paragraph (h)(2)(i)(C) of this section, if the internal inspection required by §§63.120(a)(2), 63.120(a)(3), or 63.120(b)(10) of subpart G of this part 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's, 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. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

(C) The State or local permitting authority can waive the notification requirements of paragraphs (h)(2)(i)(A)and/or (h)(2)(i)(B) of this section for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph (h)(2)(i)(A) of this section, or sooner than 7 days after submitting the notification required by paragraph (h)(2)(i)(B) of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

(ii) 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 shall notify the Administrator of any seal gap measurements. The notification shall be made in writing at least 30 calendar days in advance of any gap measurements required by §63.120(b)(1) or (b)(2) of subpart G of this part. The State or local permitting authority can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

(3) For owners or operators of sources required to request approval for a nominal control efficiency for use in calculating credits for an emissions average, the information specified in §63.652(h).

(4) The owner or operator who requests approval to monitor a different parameter than those listed in §63.644 for miscellaneous process vents or who is required by §63.653(a)(8) to establish a site-specific monitoring parameter for a point in an emissions average shall submit the information specified in paragraphs (h)(4)(i) through (h)(4)(iii) of this section. For new or reconstructed sources, the information shall be submitted with the application for approval of construction or reconstruction required by §63.5(d) of subpart Aand for existing sources, and the information shall be submitted no later than 18 months prior to the compliance date. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal.

(i) A description of the parameter(s) to be monitored to determine whether excess emissions occur and an explanation of the criteria used to select the parameter(s).

(ii) A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine excess emissions and the schedule for this demonstration. The owner or operator must certify that they will establish a range for the monitored parameter as part of the Notification of Compliance Status report required in paragraphs (e) and (f) of this section.

(iii) The frequency and content of monitoring, recording, and reporting if: monitoring and recording are not continuous; or if periods of excess emissions, as defined in paragraph (g)(6) of this section, will not be

identified in Periodic Reports required under paragraphs (e) and (g) of this section. The rationale for the proposed monitoring, recording, and reporting system shall be included.

(5) An owner or operator may request approval to use alternatives to the continuous operating parameter monitoring and record keeping provisions listed in paragraph (i) of this section.

(i) Requests shall be submitted with the Application for Approval of Construction or Reconstruction for new sources and no later than 18 months prior to the compliance date for existing sources. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal. Requests shall contain the information specified in paragraphs (h)(5)(iii) through (h)(5)(iv) of this section, as applicable.

(ii) The provisions in §63.8(f)(5)(i) of subpart A of this part shall govern the review and approval of requests.

(iii) An owner or operator may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example, once every hour) but records all values that meet set criteria for variation from previously recorded values.

(A) The requested system shall be designed to:

(1) Measure the operating parameter value at least once every hour.

(2) Record at least 24 values each day during periods of operation.

(3) Record the date and time when monitors are turned off or on.

(4) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident.

(5) Compute daily average values of the monitored operating parameter based on recorded data.

(B) The request shall contain a description of the monitoring system and data compression recording system including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all criteria of paragraph (h)(5)(iii)(A) of this section.

(iv) An owner or operator may request approval to use other alternative monitoring systems according to the procedures specified in §63.8(f) of subpart A of this part.

(6) The owner or operator shall submit the information specified in paragraphs (h)(6)(i) through (h)(6)(iii) of this section, as applicable. For existing sources, this information shall be submitted in the initial Notification of Compliance Status report. For a new source, the information shall be submitted with the application for approval of construction or reconstruction required by §63.5(d) of subpart A of this part. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal.

(i) The determination of applicability of this subpart to petroleum refining process units that are designed and operated as flexible operation units.

(ii) The determination of applicability of this subpart to any storage vessel for which use varies from year to year.

(iii) The determination of applicability of this subpart to any distillation unit for which use varies from year to year.

(i) *Record keeping.*

(1) Each owner or operator subject to the storage vessel provisions in §63.646 shall keep the records specified in §63.123 of subpart G of this part except as specified in paragraphs (i)(1)(i) through (i)(1)(iv) of this section.

(i) Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

(ii) All references to §63.122 in §63.123 of subpart G of this partshall be replaced with §63.654(e),

(iii) All references to §63.150 in §63.123 of subpart G of this partshall be replaced with §63.652.

(iv) If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

(2) Each owner or operator required to report the results of performance tests under paragraphs (f) and (g)(7) of this section shall retain a record of all reported results as well as a complete test report, as described in paragraph (f)(2)(ii) of this section for each emission point tested.

(3) Each owner or operator required to continuously monitor operating parameters under §63.644 for miscellaneous process vents or under §§63.652 and 63.653 for emission points in an emissions aver age shall keep the records specified in paragraphs (i)(3)(i) through (i)(3)(v) of this section unless an alternative record keeping system has been requested and approved under paragraph (h) of this section.

(i) The monitoring system shall measure data values at least once every hour.

(ii) The owner or operator shall record either:

(A) Each measured data value; or

(B) Block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

(iii) Daily average values of each continuously monitored parameter shall be calculated for each operating day and retained for 5 years except as specified in paragraph (i)(3)(iv) of this section.

(A) The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per day if operation is not continuous.

(B) The operating day shall be the period defined in the Notification of Compliance Status report. It may be from midnight to midnight or another daily period.

(iv) If all recorded values for a monitored parameter during an operating day are within the range established in the Notification of Compliance Status report, the owner or operator may record that all values were within the range and retain this record for 5 years rather than calculating and recording a daily average for that day. For these days, the records required in paragraph (i)(3)(ii) of this section shall also be retained for 5 years.

(v) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating.

(4) All other information required to be reported under paragraphs (a) through (h) of this section shall be retained for 5 years.

(5) [Withdrawn]

77. Appendix to Subpart CC—Tables

Table 1.--Hazardous Air Pollutants

Chemical name	CAS No.[1a]
Benzene.....	71432
Biphenyl.....	92524

1a CAS number = Chemical Abstract Service registry number assigned to specific compounds, isomers, or mixtures of compounds.

Butadiene (1,3)....	10990
Carbon disulfide...	75150
Carbonyl sulfide...	463581
Cresol (mixed isomers[2b]).....	1319773
Cresol (m-).....	108394
Cresol (o-).....	95487
Cresol (p-).....	106445
Cumene.....	98828
Dibromoethane (1,2) (ethylene di-bromide).....	106934
Dichloroethane (1,2).....	107062
Diethanolamine.....	111422
Ethylbenzene.....	100414
Ethylene glycol....	107211
Hexane.....	110543
Methanol.....	67561
Methyl ethyl ketone (2-butanone).....	78933
Methyl isobutyl ketone (hexone)...	108101
Methyl tert butyl ether.....	1634044
Naphthalene.....	91203
Phenol.....	108952
Toluene.....	108883
Trimethylpentane (2,2,4).....	540841
Xylene (mixed isomers[3b]).....	1330207
xylene (m-).....	108383
xylene (o-).....	95476
xylene (p-).....	106423

a CAS number = Chemical Abstract Service registry number assigned to specific compounds, isomers, or mixtures of compounds.

2b Isomer means all structural arrangements for the same number of atoms of each element and does not mean salts, esters, or derivatives.

3b Isomer means all structural arrangements for the same number of atoms of each element and does not mean salts, esters, or derivatives.

b Isomer means all structural arrangements for the same number of atoms of each element and does not mean salts, esters, or derivatives.

Table 2.--Leak Definitions for Pumps and Valves

Standard[4a]	Phase	Leak definition (parts per million)
§63.163 (pumps).....	I	10,000
	II	5,000
	III	2,000
§63.168 (valves).....	I	10,000
	II	1,000
	III	1,000

a Subpart H of this part.

Table 3.--Equipment Leak Record keeping and Reporting Requirements for Sources Complying With §63.648 of Subpart CC by Compliance With Subpart H of this Part [5a]

Reference (section of subpart H of this part)	Description	Comment
63.181(a).....	Record keeping system requirements.....	Except for §§63.181(b)(2)(iii) and 63.181(b)(9).
63.181(b).....	Records required for process unit equipment.....	Except for §§63.181(b)(2)(iii) and 63.181(b)(9).
63.181(c).....	Visual inspection documentation.....	Except for §§63.181(b)(2)(iii) and 63.181(b)(9).
63.181(d).....	Leak detection record requirements.....	Except for §63.181(d)(8).
63.181(e).....	Compliance requirements	This subsection does not

4a Subpart H of this part.

[5a] This table does not include all the requirements delineated under the referenced sections. See referenced sections for specific requirements.

	for pressure tests for batch product process equipment trains	apply to subpart CC.
63.181(f)	Compressor compliance test records.	
63.181(g)	Closed-vent systems and control device record requirements.	
63.181(h)	Process unit quality improvement program records.	
63.181(i)	Heavy liquid service determination record.	
63.181(j)	Equipment identification record.	
63.181(k)	Enclosed-vented process unit emission limitation record requirements.	
63.182(a)	Reports.	
63.182(b)	Initial notification report requirements	Not required.
63.182(c)	Notification of compliance status report	Except in §63.182(c); change 'within 90 days of the compliance dates' to 'within 150 days of the compliance dates'; except in §§63.182 (c)(2) and (c)(4).
63.182(d)	Periodic report	Except for §§63.182(d)(2)(vii), (d)(2)(viii), and (d)(3).

a This table does not include all the requirements delineated under the referenced sections. See referenced sections for specific requirements.

Table 4.-- Gasoline Distribution Emission Point
Record keeping and Reporting Requirements[6a]

[6a] This table does not include all the requirements delineated under the referenced sections. See referenced sections for specific requirements.

Reference (section of subpart R of this part)	Description	Comment
63.428(b)	Records of test results for each gasoline cargo tank loaded at the facility.	
63.428(c)	Continuous monitoring data record keeping requirements.	
63.428(g)(1)	Semiannual report loading rack information	Required to be submitted with the periodic report required under 40 CFR part 63 subpart CC.
63.428(h)(1) through (h)(3)	Excess emissions report loading rack information.	Required to be submitted with the periodic report required under 40 CFR part 63 subpart CC.

[a] This table does not include all the requirements delineated under the referenced sections. See referenced sections for specific requirements.

Table 5.--Marine Vessel Loading and Unloading Operations

Record keeping and Reporting Requirements[7a]

Reference (section of subpart Y of this part)	Description	Comment
63.565(a)	Performance test/site	The information required

[7a] This table does not include all the requirements delineated under the sections. See referenced sections for specific requirements.

	test plan.	under this paragraph is to be submitted with the notification of compliance status report required under 40 CFR part 63, subpart CC.
63.565(b).....	Performance test data requirements.	
63.567(a).....	General Provisions (subpart A) applicability	
63.567(c).....	Vent system valve bypass record keeping requirements	
63.567(d).....	Continuous equipment monitoring record keeping requirements	
63.567(e).....	Flare record keeping requirements	

63.567(f).....	Quarterly report requirements	The information required under this paragraph is to be submitted with the periodic report required under 40 CFR part 63 subpart CC.
63.567(g).....	Marine vessel vapor-tightness documentation	
63.567(h).....	Documentation file maintenance	
63.567(i).....	Emission estimation reporting and record keeping procedures	

[a] This table does not include all the requirements delineated under the sections. See referenced sections for specific requirements.

Table 6.--General Provisions Applicability to Subpart CC [8a]

Reference	Applies to subpart CC	Comment
63.1(a)(1).....	Yes	
63.1(a)(2).....	Yes	
63.1(a)(3).....	Yes	
63.1(a)(4).....	No	Subpart CC (this table) specifies applicability of each paragraph in subpart A to subpart CC.
63.1(a)(5)-63.1(a)(9).....	No	
63.1(a)(10).....	No	Subpart CC and other cross - referenced subparts specify calendar or operating day.
63.1(a)(11).....	Yes	
63.1(a)(12).....	Yes	
63.1(a)(13).....	Yes	
63.1(a)(14).....	Yes	
63.1(b)(1).....	No	Subpart CC specifies its own applicability.
63.1(b)(2).....	Yes	
63.1(b)(3).....	No	
63.1(c)(1).....	No	Subpart CC explicitly specifies requirements that apply.
63.1(c)(2).....	No	Area sources are not subject to subpart CC.
63.1(c)(3).....	No	
63.1(c)(4).....	Yes	
63.1(c)(5).....	Yes	Except that sources are not required to submit notifications overridden by this table.
63.1(d).....	No	
63.1(e).....	No	
63.2.....	Yes	§63.641 of subpart CC specifies that if the same term is

[8a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

		defined in subparts A and CC, it shall have the meaning given in subpart CC.
63.3	No	Units of measure are spelled out in subpart CC.
63.4(a)(1)-63.4(a)(3)	Yes	
63.4(a)(4)	No	Reserved.
63.4(a)(5)	Yes	
63.4(b)	Yes	

Table 6.--General Provisions Applicability to Subpart CC [9a]--Contd.

Reference	Applies to subpart CC	Comment
63.4(c)	Yes	
63.5(a)(1)	Yes	Except replace term 'source' and 'stationary source' in §63.5(a)(1) of subpart A with 'affected source.'
63.5(a)(2)	Yes	
63.5(b)(1)	Yes	
63.5(b)(2)	No	Reserved.
63.5(b)(3)	Yes	
63.5(b)(4)	Yes	Except the cross - reference to §63.9(b) is changed to §63.9(b)(4) and (5). Subpart CC overrides §63.9(b)(2) and (b)(3).
63.5(b)(5)	Yes	
63.5(b)(6)	Yes	
63.5(c)	No	Reserved.
63.5(d)(1)(i)	Yes	Except that the application shall be submitted as soon as practicable before startup but no later than 90 days (rather than 60 days) after the promulgation date of subpart CC

[9a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

		if the construction or reconstruction had commenced and initial startup had not occurred before the promulgation of subpart CC.
63.5(d)(1)(ii)....	Yes	Except that for affected sources subject to subpart CC, emission estimates specified in §63.5(d)(1)(ii)(H) are not required.

Table 6.--General Provisions Applicability to Subpart CC [10a]--Contd.

Reference	Applies to subpart CC	Comment
63.5(d)(1)(iii)...	No	Subpart CC requires submittal of the notification of compliance status report in §63.654(e).
63.5(d)(2).....	No	
63.5(d)(3).....	Yes	Except §63.5(d)(3)(ii) does not apply.
63.5(d)(4).....	Yes	
63.5(e).....	Yes	
63.5(f)(1).....	Yes	
63.5(f)(2).....	Yes	Except that the '60 days' in the cross - referenced §63.5(d)(1) is changed to '90 days, ' and the cross - reference to (b)(2) does not apply.
63.6(a).....	Yes	
63.6(b)(1).....	No	Subpart CC specifies compliance dates for sources subject to subpart CC.
63.6(b)(2).....	No	
63.6(b)(3).....	Yes	
63.6(b)(4).....	No	May apply when standards are proposed under section 112(f) of the Clean Air Act.

[10a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

63.6(b)(5).....	No	§63.654(d) of subpart CC includes notification requirements.
63.6(b)(6).....	No	
63.6(b)(7).....	No	
63.6(c)(1).....	No	§63.640 of subpart CC specifies the compliance date.
63.6(c)(2)-63.6(c)(4).....	No	
63.6(c)(5).....	Yes	
63.6(d).....	No	

Table 6.--General Provisions Applicability to Subpart CC [11a]--Contd.

Reference	Applies to subpart CC	Comment
§ 63.6(e).....	Yes.....	Does not apply to Group 2 emission points. [12b] The startup, shutdown, and malfunction plan specified in § 63.6(e)(3) is not required for wastewater operations that are not subject to subpart G of this part.
.....	.....	Except that actions taken during a startup, shutdown, or malfunction that are not consistent with the startup, shutdown, and malfunction plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.

[11a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

[12b] The plan, and any records or reports of startup, shutdown, and malfunction do not apply to Group 2 emission points.

63.6(f)(1)..... | Yes | |
63.6(f)(2)(i)..... | Yes | |
63.6(f)(2)(ii).... | Yes | Subpart CC specifies the use of |
| | monitoring data in determining |
| | compliance with subpart CC. |
63.6(f)(2)(iii) | Yes | |
(A), (B), and | | |
(C)..... | | |
63.6(f)(2)(iii)(D)... No | |
63.6(f)(2)(iv).... | Yes | |
63.6(f)(2)(v)..... | Yes | |
63.6(f)(3)..... | Yes | |
63.6(g)..... | Yes | |
63.6(h)..... | No | Subpart CC does not require |
| | opacity and visible emission |
| | standards. |
63.6(h) (1) and | Yes | |
(2)..... | | |

Table 6.--General Provisions Applicability to Subpart CC [13a]--Contd.

Reference	Applies to subpart CC	Comment
63.6(h) (4) and (5).....	No	Visible emission requirements and timing in subpart CC.
63.6(h)(6).....	Yes	
63.6(h) (7) through (9).....	No	Subpart CC does not require opacity standards.
63.6(i).....	Yes	Except for §63.6(i)(15), which is reserved.
63.6(j).....	Yes	
63.7(a)(1).....	No	Subpart CC specifies required testing and compliance demonstration procedures.
63.7(a)(2).....	No	Test results must be submitted in the notification of compliance status report due 150 days after compliance date,

[13a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

		as specified in §63.654(d) of subpart CC.
63.7(a)(3).....	Yes	
63.7(b).....	No	
63.7(c).....	No	
63.7(d).....	Yes	
63.7(e)(1).....	Yes	
63.7(e)(2).....	Yes	
63.7(e)(3).....	No	Subpart CC specifies test methods and procedures.
63.7(e)(4).....	Yes	
63.7(f).....	No	Subpart CC specifies applicable methods and provides alternatives.
63.7(g).....	No	Performance test reporting specified in § 63.654(d).
63.7(h)(1).....	Yes	
63.7(h)(2).....	Yes	

Table 6.--General Provisions Applicability to Subpart CC [14a]--Contd.

Reference	Applies to subpart CC	Comment
63.7(h)(3).....	Yes	Yes, except site - specific test plans shall not be required, and where §63.7(g)(3) specifies submittal by the date the site - specific test plan is due, the date shall be 90 days prior to the notification of compliance status report in §63.654(d).
63.7(h)(4).....	No	
63.7(h)(5).....	Yes	
63.8(a).....	No	
63.8(b)(1).....	Yes	
63.8(b)(2).....	No	Subpart CC specifies locations to conduct monitoring.

[14a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

63.8(b)(3).....	Yes	
63.8(c)(1)(i).....	Yes	
63.8(c)(1)(ii)....	No	Addressed by periodic reports in § 63.654(e) of subpart CC.
63.8(c)(1)(iii)...	Yes	
63.8(c)(2).....	Yes	
63.8(c)(3).....	Yes.....	Except that verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment would monitor accurately.

Table 6.--General Provisions Applicability to Subpart CC [15a]--Contd.

Reference	Applies to subpart CC	Comment
63.8(c)(4).....	No	Subpart CC specifies monitoring frequency in § 63.641 and §63.654(g)(3) of subpart CC.
63.8(c)(5)-63.8(c)(8).....	No	
63.8(d).....	No	
63.8(e).....	No	
63.8(f)(1).....	Yes	
63.8(f)(2).....	Yes	
63.8(f)(3).....	Yes	
63.8(f)(4)(i).....	No	Timeframe for submitting request is specified in §63.654(f)(4) of subpart CC.
63.8(f)(4)(ii)....	Yes	
63.8(f)(4)(iii)...	No	

[15a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

63.8(f)(5)(i).....	Yes	
63.8(f)(5)(ii)....	No	
63.8(f)(5)(iii)...	Yes	
63.8(f)(6).....	No	Subpart CC does not require continuous emission monitors.
63.8(g).....	No	Subpart CC specifies data reduction procedures in § 63.654(h)(3).
63.9(a).....	Yes	Except that the owner or operator does not need to send a copy of each notification submitted to the Regional Office of the EPA as stated in §63.9(a)(4)(ii).
63.9(b)(1)(i).....	No	Specified in §63.654(d)(2) of subpart CC.
63.9(b)(1)(ii)....	No	
63.9(b)(2).....	No	An initial notification report is not required under subpart CC.
63.9(b)(3).....	No	

Table 6.--General Provisions Applicability to Subpart CC [16a]--Contd.

Reference	Applies to subpart CC	Comment
63.9(b)(4).....	Yes	Except that the notification in § 63.9(b)(4)(i) shall be submitted at the time specified in § 63.654(d)(2) of subpart CC.
63.9(b)(5).....	Yes	Except that the notification in § 63.9(b)(5) shall be submitted at the time specified in § 63.654(d)(2) of subpart CC.
63.9(c).....	Yes	
63.9(d).....	Yes	
63.9(e).....	No	

[16a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

63.9(f).....	No	
63.9(g).....	No	
63.9(h).....	No	Subpart CC §63.652(d) specifies notification of compliance status report requirements.
63.9(i).....	Yes	
63.9(j).....	No	
63.10(a).....	Yes	
63.10(b)(1).....	No	§63.644(d) of subpart CC specifies record retention requirements.
63.10(b)(2)(i)....	Yes	
63.10(b)(2)(ii)...	Yes	
63.10(b)(2)(iii)...	No	
63.10(b)(2)(iv)...	Yes	
63.10(b)(2)(v)....	Yes	
63.10(b)(2)(vi)-(ix).....	No	
63.10(b)(2)(x)....	Yes	
63.10(b)(2)(xii)-(xiv).....	No	
63.10(b)(3).....	No	
63.10(c).....	No	
63.10(d)(1).....	No	
63.10(d)(2).....	No	§63.654(d) of subpart CC specifies performance test reporting.
63.10(d)(3).....	No	
63.10(d)(4).....	Yes	
63.10(d)(5)(i)....	Yes[17b].....	Except that reports required by §63.10(d)(5)(i) may be submitted at the same time as periodic reports specified in §63.654(e) of subpart CC.

Table 6.--General Provisions Applicability to Subpart CC [18a]--Contd.

[17b] The plan, and any records or reports of startup, shutdown, and malfunction do not apply to Group 2 emission points.

[18a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

Reference	Applies to subpart CC	Comment
§ 63.10(d)(5)(ii)	Yes	Except that actions taken during a startup, shutdown, or malfunction that are not consistent with the startup, shutdown, and malfunction plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.
63.10(e)	No	
63.10(f)	Yes	
63.11-63.15	Yes	

[a] Wherever subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

[b] The plan, and any records or reports of startup, shutdown, and malfunction do not apply to Group 2 emission points.

Table 7.--Fraction Measured(F_m), Fraction Emitted (F_e), and Fraction Removed (F_r) for HAP Compounds in Wastewater Streams

Chemical name	CAS No. [19a]	F_m	F_e	Fr
Benzene	71432	1.00	0.80	0.99
Biphenyl	92524	0.86	0.45	0.99
Butadiene (1,3-)	106990	1.00	0.98	0.99
Carbon disulfide	75150	1.00	0.92	0.99
Cumene	98828	1.00	0.88	0.99
Dichloroethane (1,2-) (Ethylene	107062	1.00	0.64	0.99

[19a] CAS numbers refer to the Chemical Abstracts Service registry number assigned to specific compounds, isomers, or mixtures of compounds.

dichloride.....				
Ethylbenzene.....	100414	1.00	0.83	0.99
Hexane.....	110543	1.00	1.00	0.99
Methanol.....	67561	0.85	0.17	0.31
Methyl ethyl ketone (2-Butanone).....	78933	0.99	0.48	0.95
Methyl isobutyl ketone (Hexone).....	108101	0.98	0.53	0.99
Methyl tert-butyl ether.....	1634044	1.00	0.57	0.99
Naphthalene.....	91203	0.99	0.51	0.99
Trimethylpentane (2,2,4-).....	540841	1.00	1.00	0.99
Xylene (m-).....	108383	1.00	0.82	0.99
Xylene (o-).....	95476	1.00	0.79	0.99
Xylene (p-).....	106423	1.00	0.82	0.99

[a] CAS numbers refer to the Chemical Abstracts Service registry number assigned to specific compounds, isomers, or mixtures of compounds.

Table 8.--Valve Monitoring Frequency for Phase III

Performance level	Valve monitoring frequency
Leaking valves[20a] (%)	
≥ 4.....	Monthly or QIP.[21b]
< 4.....	Quarterly.
< 3.....	Semiannual.
< 2.....	Annual.

[a] Percent leaking valves is calculated as a rolling average of two consecutive monitoring periods.

[b] QIP=Quality improvement program. Specified in §63.175 of subpart H of this part.

[20a] Percent leaking valves is calculated as a rolling average of two consecutive monitoring periods.

[21b] QIP=Quality improvement program. Specified in §63.175 of subpart H of this part.

Table 9.--Valve Monitoring Frequency for Alternative

Performance level	Valve monitoring frequency under § 63.649 alternative
Leaking valves[22a] (%)	
≥ 5	Monthly or QIP.[23b]
< 5	Quarterly.
< 4	Semiannual.
< 3	Annual.

[a] Percent leaking valves is calculated as a rolling average of two consecutive monitoring periods.

[b] QIP=Quality improvement program. Specified in §63.175 of subpart H of this part.

Table 10.--Miscellaneous Process Vents--Monitoring, Record keeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume

Control device	Parameters to be monitored[24a]	Record keeping and reporting requirements for monitored parameters
Thermal	Firebox temperature[25b]	1. Continuous records

[22a] Percent leaking valves is calculated as a rolling average of two consecutive monitoring periods.

[23b] QIP=Quality improvement program. Specified in §63.175 of subpart H of this part.

[24a] Regulatory citations are listed in parentheses.

[25b] Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

incinerator.....	(63.644(a)(1)(i))	[26c].
		2. Record and report the firebox temperature averaged over the full period of the performance test--NCS [27d].
		3. Record the daily average firebox temperature for each operating day [28e].
		4. Report all daily average temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected [29f]--PR [30g].
Catalytic incinerator.....	Temperature upstream and downstream of the catalyst bed (63.644(a)(1)(ii))	1. Continuous records [31c].
		2. Record and report the upstream and downstream temperatures and the temperature difference across the catalyst bed averaged over the full period of the

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[26c] 'Continuous records' is defined in §63.641.

[27d] NCS = Notification of compliance status report described in §63.654.

[28e] The daily average is the average of all recorded parameter values for the operating day. If all recorded values during an operating day are within the range established in the NCS or operating permit, a statement to this effect can be recorded instead of the daily average.

[29f] When a period of excess emission is caused by insufficient monitoring data, as described in §63.654(g)(6)(i) (C) or (D), the duration of the period when monitoring data were not collected shall be included in the Periodic Report.

[30g] PR = Periodic Reports described in §63.654(g).

[31c] 'Continuous records' is defined in §63.641.

		performance test--NCS [32d].
		3. Record the daily average upstream temperature and temperature difference across the catalyst bed for each operating day [33e].

Table 10.--Miscellaneous Process Vents--Monitoring, Record keeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume--Contd.

Control device	Parameters to be monitored[34a]	Record keeping and reporting requirements for monitored parameters
		4. Report all daily average upstream temperatures that are outside the range established in the NCS or operating permit--PR [35g].
		5. Report all daily average temperature differences across the catalyst bed that are outside the range established in the NCS or operating permit--

[32d] NCS = Notification of compliance status report described in §63.654.

[33e] The daily average is the average of all recorded parameter values for the operating day. If all recorded values during an operating day are within the range established in the NCS or operating permit, a statement to this effect can be recorded instead of the daily average.

[34a] Regulatory citations are listed in parentheses.

[35g] PR = Periodic Reports described in §63.654(g).

		PR [36g].
		6. Report all operating days when insufficient monitoring data are collected [37f].
Boiler or process heater with a design heat capacity less than 44 megawatts where the vent stream is *not* introduced into the flame zone [40h, 41i]	Firebox temperature[38b] (63.644(a)(4))	1. Continuous records [39c].
		2. Record and report the firebox temperature averaged over the full period of the performance test--NCS [42d].
		3. Record the daily average firebox temperature for each

[36g] PR = Periodic Reports described in §63.654(g).

[37f] When a period of excess emission is caused by insufficient monitoring data, as described in §63.654(g)(6)(i) (C) or (D), the duration of the period when monitoring data were not collected shall be included in the Periodic Report.

[38b] Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

[39c] 'Continuous records' is defined in §63.641.

[40h] No monitoring is required for boilers and process heaters with a design heat capacity 44 megawatts or for boilers and process heaters where all vent streams are introduced into the flame zone. No recordkeeping or reporting associated with monitoring is required for such boilers and process heaters.

[41i] Process vents that are routed to refinery fuel gas systems are not regulated under this subpart. No monitoring, recordkeeping, or reporting is required for boilers and process heaters that combust refinery fuel gas.

[42d] NCS = Notification of compliance status report described in §63.654.

		operating day [43e].
		4. Report all daily average firebox temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected [44f]--PR [45g].

Table 10.--Miscellaneous Process Vents--Monitoring, Record keeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume--Contd.

Control device	Parameters to be monitored[46a]	Record keeping and reporting requirements for monitored parameters
Flare.....	Presence of a flame at the pilot light (63.644(a)(2))	1. Hourly records of whether the monitor was continuously operating and whether a pilot flame was continuously present during each hour. 2. Record and report the presence of a flame at the pilot light over

[43e] The daily average is the average of all recorded parameter values for the operating day. If all recorded values during an operating day are within the range established in the NCS or operating permit, a statement to this effect can be recorded instead of the daily average.

[44f] When a period of excess emission is caused by insufficient monitoring data, as described in §63.654(g)(6)(i) (C) or (D), the duration of the period when monitoring data were not collected shall be included in the Periodic Report.

[45g] PR = Periodic Reports described in §63.654(g).

[46a] Regulatory citations are listed in parentheses.

		the full period of the compliance determination--NCS [47d].
		3. Record the times and durations of all periods when all pilot flames for a flare are absent or the monitor is not operating.
		4. Report the times and durations of all periods when all pilot flames for a flare are absent or the monitor is not operating.
All control devices.....	Presence of flow diverted to the atmosphere from the control device (63.644(c)(1)) *or*	1. Hourly records of whether the flow indicator was operating and whether flow was detected at any time during each hour.
		2. Record and report the times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating --PR [48g].
	Monthly inspections of sealed valves [63.644(c)(2)]	1. Records that monthly inspections were performed.

Table 10.--Miscellaneous Process Vents--Monitoring, Record keeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume--Contd.

	Parameters to be	Record keeping and reporting requirements

[47d] NCS = Notification of compliance status report described in §63.654.

[48g] PR = Periodic Reports described in §63.654(g).

Control device	monitored[49a]	for monitored parameters
		2. Record and report all monthly inspections that show the valves are not closed or the seal has been changed- -PR [50g].

a Regulatory citations are listed in parentheses.
b Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.
c 'Continuous records' is defined in §63.641.
d NCS = Notification of compliance status report described in §63.654.
e The daily average is the average of all recorded parameter values for the operating day. If all recorded values during an operating day are within the range established in the NCS or operating permit, a statement to this effect can be recorded instead of the daily average.
f When a period of excess emission is caused by insufficient monitoring data, as described in §63.654(g)(6)(i)(C) or (D), the duration of the period when monitoring data were not collected shall be included in the Periodic Report.
g PR = Periodic Reports described in §63.654(g).
h No monitoring is required for boilers and process heaters with a design heat capacity ³44 megawatts or for boilers and process heaters where all vent streams are introduced into the flame zone. No record keeping or reporting associated with monitoring is required for such boilers and process heaters.
i Process vents that are routed to refinery fuel gas systems are not regulated under this subpart. No monitoring, record keeping, or reporting is required for boilers and process heaters that combust refinery fuel gas.

Subpart UUU–National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

[The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart UUU: P007, P009, P019, P020, and P037.]

78. **§63.1560 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (HAP) emitted from petroleum refineries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

79. **§63.1561 Am I subject to this subpart?**

(a) You are subject to this subpart if you own or operate a petroleum refinery that is located at a major source of HAP emissions.

[49a] Regulatory citations are listed in parentheses.

[50g] PR = Periodic Reports described in §63.654(g).

(1) A petroleum refinery is a an establishment engaged primarily in petroleum refining as defined in the Standard Industrial Classification (SIC) code 2911 and the North American Industry Classification (NAIC) code 32411, and used mainly for:

(i) Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants;

(ii) Separating petroleum; or

(iii) Separating, cracking, reacting, or reforming an intermediate petroleum stream, or recovering a by-product(s) from the intermediate petroleum stream (e.g., sulfur recovery).

(2) A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

(b) [Reserved]

80. **§63.1562 What parts of my plant are covered by this subpart?**

(a) This subpart applies to each new, reconstructed, or existing affected source at a petroleum refinery.

(b) The affected sources are:

(1) Each catalytic cracking unit that regenerates catalyst.

(2) Each catalytic reforming unit that regenerates catalyst.

(3) Each sulfur recovery unit and the tail gas treatment unit serving it.

(4) Each bypass line serving a new, existing, or reconstructed catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit. This means each vent system that contains a bypass line (e.g., ductwork) that could divert an affected vent stream away from a control device used to comply with the requirements of this subpart.

(c) An affected source is a new affected source if you commence construction of the affected source after September 11, 1998, and you meet the applicability criteria in §63.1561 at the time you commenced construction.

(d) Any affected source is reconstructed if you meet the criteria in §63.2.

(e) An affected source is existing if it is not new or reconstructed.

(f) This subpart does not apply to:

(1) A thermal catalytic cracking unit.

(2) A sulfur recovery unit that does not recover elemental sulfur or where the modified reaction is carried out in a water solution which contains a metal ion capable of oxidizing the sulfide ion to sulfur (e.g., the LO-CAT II process).

(3) A redundant sulfur recovery unit not located at a petroleum refinery and used by the refinery only for emergency or maintenance backup.

(4) Equipment associated with bypass lines such as low leg drains, high point bleed, analyzer vents, open-ended valves or lines, or pressure relief valves needed for safety reasons.

(5) Gaseous streams routed to a fuel gas system.

81. **§63.1563 When do I have to comply with this subpart?**

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you startup your affected source before April 11 2002, then you must comply with the emission limitations and work practice standards for new and reconstructed sources in this subpart no later than April 11, 2002.

(2) If you startup your affected source after April 11, 2002, you must comply with the emission limitations and work practice standards for new and reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission limitations and work practice standards for existing affected sources in this subpart by no later than April 11, 2005 except as specified in paragraph (c) of this section.

(c) We will grant an extension of compliance for an existing catalytic cracking unit allowing additional time to meet the emission limitations and work practice standards for catalytic cracking units in §§63.1564 and 63.1565 if you commit to hydrotreating the catalytic cracking unit feedstock and to meeting the emission limitations of this subpart on the same date that your facility meets the final Tier 2 gasoline sulfur control standard (40 CFR part 80, subpart J). To obtain an extension, you must submit a written notification to your permitting authority according to the requirements in §63.1574(e). Your notification must include the information in paragraphs (c)(1) and (2) of this section.

(1) Identification of the affected source with a brief description of the controls to be installed (if needed) to comply with the emission limitations for catalytic cracking units in this subpart.

(2) A compliance schedule, including the information in paragraphs (c)(2)(i) through (iv) of this section.

(i) The date by which onsite construction or the process change is to be initiated.

(ii) The date by which onsite construction or the process change is to be completed.

(iii) The date by which your facility will achieve final compliance with both the final Tier 2 gasoline sulfur control standard as specified in §80.195, and the emission limitations and work practice standards for catalytic cracking units in this subpart. In no case will your permitting authority grant an extension beyond the date you are required to meet the Tier 2 gasoline sulfur control standard or December 31, 2009, whichever comes first. If you don't comply with the emission limitations and work practice standards for existing catalytic cracking units by the specified date, you will be out-of-compliance with the requirements for catalytic cracking units beginning April 11, 2005.

(iv) A brief description of interim emission control measures that will be taken to ensure proper operation and maintenance of the process equipment during the period of the compliance extension.

(d) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the requirements in paragraphs (d)(1) and (2) of this section apply.

(1) Any portion of the existing facility that is a new affected source or a new reconstructed source must be in compliance with the requirements of this subpart upon startup.

(2) All other parts of the source must be in compliance with the requirements of this subpart by no later than 3 years after it becomes a major source or, if applicable, the extended compliance date granted according to the requirements in paragraph (c) of this section.

(e) You must meet the notification requirements in §63.1574 according to the schedule in §63.1574 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before the date you are required to comply with the emission limitations and work practice standards in this subpart.

Catalytic Cracking Units, Catalytic Reforming Units, Sulfur Recovery Units, and Bypass Lines

82. §63.1564 What are my requirements for metal HAP emissions from catalytic cracking units?

(a) What emission limitations and work practice standards must I meet? You must:

(1) Meet each emission limitation in Table 1 of this subpart that applies to you. If your catalytic cracking unit is subject to the NSPS for PM in §60.102 of this chapter, you must meet the emission limitations for NSPS units. If your catalytic cracking unit isn't subject to the NSPS for PM, you can choose from the four options in paragraphs (a)(1)(i) through (iv) of this section:

(i) You can elect to comply with the NSPS requirements (Option 1);
(ii) You can elect to comply with the PM emission limit (Option 2);
(iii) You can elect to comply with the Nickel (Ni) lb/hr emission limit (Option 3); or
(iv) You can elect to comply with the Ni lb/1,000 lbs of coke burn-off emission limit (Option 4).
(2) Comply with each operating limit in Table 2 of this subpart that applies to you.
(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in §63.1574(f) and operate at all times according to the procedures in the plan.
(4) The emission limitations and operating limits for metal HAP emissions from catalytic cracking units required in paragraphs (a)(1) and (2) of this section do not apply during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in §63.1575(j).
(b) <u>How do I demonstrate initial compliance with the emission limitations and work practice standard?</u> You must:
(1) Install, operate, and maintain a continuous monitoring system(s) according to the requirements in §63.1572 and Table 3 of this subpart.
(2) Conduct a performance test for each catalytic cracking unit not subject to the NSPS for PM according to the requirements in §63.1571 and under the conditions specified in Table 4 of this subpart.
(3) Establish each site-specific operating limit in Table 2 of this subpart that applies to you according to the procedures in Table 4 of this subpart.
(4) Use the procedures in paragraphs (b)(4)(i) through (iv) of this section to determine initial compliance with the emission limitations.
(i) If you elect Option 1 in paragraph (a)(1)(i) of ths section, 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:

$$R_c = K_1 Q_r\ (\%CO_2 + \%CO) + K_2 Q_a - K_3 Q_r[(\%CO/2) + \%CO_2 + \%O_2] + K_3 Q_{oxy}(\%O_{xy})$$

(Eq. 1)

where:

R_c = Coke burn-off rate, kg/hr (lb/hr);
Q_r = Volumetric flow rate of exhaust gas from catalyst regenerator before adding air or gas streams. Example: You may measure after an electrostatic precipitator, but you 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).

$$E = \frac{K \ x \ C_s \ x \ Q_{sd}}{R_c}$$

(Eq. 2)

Where:

E	=	Emission rate of PM, kg/1,000 kg (lb/1,000 lb) of coke burn-off;
C_s	=	Concentration of PM, g/dscm (lb/dscf);
Q_{sd}	=	Volumetric flow rate of the catalytic cracking unit catalyst regenerator flue gas as measured by Method 2 in appendix A to part 60 of this chapter, 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)).

$$E_s = 1.0 + A \ (H/R_c) \ K'$$

(Eq. 3)

Where:

E_s	=	Emission rate of PM allowed, kg/1,000 kg (1b/1,000 lb) of coke burn-off in catalyst regenerator;
1.0	=	Emission limitation, kg coke/1,000 kg (lb coke/1,000 lb);
A	=	Allowable incremental rate of PM emissions, 0.18 g/million cal (0.10 lb/million Btu); and
H	=	Heat input rate from solid or liquid fossil fuel, million cal/hr (million Btu/hr). Make sure your permitting authority 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) If you elect Option 2 in paragraph (a)(1)(ii) of this section, the PM emission limit, compute your PM emission rate (lb/1,000 lbs of coke burn-off) using Equations 1 and 2 of this section and your site-specific opacity operating limit (if you use a continuous opacity monitoring system) using Equation 4 of this section as follows:

$$Opacity \ Limit = Opacity_{st} \times \left(\frac{1 \ lb/klb \ coke \ burn}{PMEmR_{st}} \right)$$

(Eq. 4)

Where:

Opacity limit = Maximum permissible hourly average opacity, percent, or 10 percent, whichever is greater;
$Opacity_{st}$ = Hourly average opacity measured during the source test runs, percent; and
$PMEmR_{st}$ = PM emission rate measured during the source test, lb/1,000 lbs coke burn.

$$E_{Ni_1} = C_{Ni} \text{ x } Q_{sd}$$

(Eq. 5)

(iii) If you elect Option 3 in paragraph (a)(1)(iii) of this section, the Ni lb/hr emission limit, compute your Ni emission rate using Equation 5 of this section and your site-specific Ni operating limit (if you use a continuous opacity monitoring system) using Equations 6 and 7 of this section as follows:
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 to part 60 of this chapter, mg/dscm (lbs/dscf).

$$Opacity_1 = \frac{13 \ g \ Ni/hr}{NiEmR1_{st}} \ x \ Opacity_{st}$$

(Eq. 6)

Where:

$Opacity_1$ = 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.

$$\text{Ni Operating Limit}_1 = \text{Opacity}_1 \times Q_{mon,st} \times \text{E-Cat}_{st}$$

(Eq. 7)

Where:

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 §63.1573, acfm; and

E-Cat_{st} = Ni concentration on equilibrium catalyst measured during source test, ppmw.

(iv) If you elect Option 4 in paragraph (a)(1)(iv) of this section, the Ni lbs/1,000 lbs of coke burn-off emission limit, compute your Ni emission rate using Equations 1 and 8 of this section and your site-specific Ni operating limit (if you use a continuous opacity monitoring system) using Equations 9 and 10 of this section as follows:

$$E_{Ni_2} = \frac{C_{Ni} \text{ x } Q_{sd}}{R_c}$$

(Eq. 8)

Where:

E_{Ni2} = Normalized mass emission rate of Ni, mg/kg coke (lb/1,000 lbs coke).

$$Opacity_2 = \frac{1.0 \ mg/kg \ coke}{NiEmR2_{st}} \ x \ Opacity_{st}$$

(Eq. 9)

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.

$$\text{Ni Operating Limit}_2 = \text{Opacity}_2 \times \text{E-Cat}_{st} \text{ x } \frac{Q_{mon,st}}{R_{c,st}}$$

(Eq. 10)

Where:

Ni operating $limit_2$ = Maximum permissible hourly average Ni operating limit, percent-ppmw-acfm-hr/kg coke, i.e., your 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.

(5) Demonstrate initial compliance with each emission limitation that applies to you according to Table 5 of this subpart.

(6) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting your operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status.

(7) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.1574.

(c) How do I demonstrate continuous compliance with the emission limitations and work practice standards? You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 1 and 2 of this subpart that applies to you according to the methods specified in Tables 6 and 7 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by maintaining records to document conformance with the procedures in your operation, maintenance, and monitoring plan.

(3) If you use a continuous opacity monitoring system and elect to comply with Option 3 in paragraph (a)(1)(iii) of this section, determine continuous compliance with your site-specific Ni operating limit by using Equation 11 of this section as follows:

$$Ni\ Operating\ Value_1 = Opacity \times Q_{mon} \times E\text{-}Cat$$

(Eq. 11)

Where:

Ni operating $value_1$ = Maximum permissible hourly average Ni standard operating value, %-acfm-ppmw;

Opacity = Hourly average opacity, percent;

Q_{mon} = Hourly average actual gas flow rate as measured by continuous parameter monitoring system or calculated by alternative procedure in §63.1573, acfm; and

E-Cat = Ni concentration on equilibrium catalyst from weekly or more recent measurement, ppmw.

(4) If you use a continuous opacity monitoring system and elect to comply with Option 4 in paragraph (a)(1)(iv) of this section, determine continuous compliance with your site-specific Ni operating limit by using Equation 12 of this section as follows:

$$Ni\ Operating\ Value_2 = \frac{Opacity \times E\text{-}Cat\ x\ Q_{mon}}{R_c}$$

(Eq. 12)

Where:
Ni operating value$_2$ = Maximum permissible hourly average Ni standard operating value, percent-acfm-ppmw-hr/kg coke.

83. **§63.1565 What are my requirements for organic HAP emissions from catalytic cracking units?**

(a) What emission limitations and work practice standards must I meet? You must:

(1) Meet each emission limitation in Table 8 of this subpart that applies to you. If your catalytic cracking unit is subject to the NSPS for carbon monoxide (CO) in §60.103 of this chapter, you must meet the emission limitations for NSPS units. If your catalytic cracking unit isn't subject to the NSPS for CO, you can choose from the two options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to comply with the NSPS requirements (Option 1); or

(ii) You can elect to comply with the CO emission limit (Option 2).

(2) Comply with each site-specific operating limit in Table 9 of this subpart that applies to you.

(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in §63.1574(f) and operate at all times according to the procedures in the plan.

(4) The emission limitations and operating limits for organic HAP emissions from catalytic cracking units required in paragraphs (a)(1) and (2) of this section do not apply during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in §63.1575(j).

(b) How do I demonstrate initial compliance with the emission limitations and work practice standards? You must:

(1) Install, operate, and maintain a continuous monitoring system according to the requirements in §63.1572 and Table 10 of this subpart. Except:

(i) Whether or not your catalytic cracking unit is subject to the NSPS for CO in §60.103 of this chapter, you don't have to install and operate a continuous emission monitoring system if you show that CO emissions from your vent average less than 50 parts per million (ppm), dry basis. You must get an exemption from your permitting authority, based on your written request. To show that the emissions average is less than 50 ppm (dry basis), you must continuously monitor CO emissions for 30 days using a CO continuous emission monitoring system that meets the requirements in §63.1572.

(ii) If your catalytic cracking unit isn't subject to the NSPS for CO, you don't have to install and operate a continuous emission monitoring system or a continuous parameter monitoring system if you vent 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) If your catalytic cracking unit isn't subject to the NSPS for CO, you don't have to install and operate a continuous emission monitoring system or a continuous parameter monitoring system if you vent emissions to a boiler or process heater in which all vent streams are introduced into the flame zone.

(2) Conduct each performance test for a catalytic cracking unit not subject to the NSPS for CO according to the requirements in §63.1571 and under the conditions specified in Table 11 of this subpart.

(3) Establish each site-specific operating limit in Table 9 of this subpart that applies to you according to the procedures in Table 11 of this subpart.

(4) Demonstrate initial compliance with each emission limitation that applies to you according to Table 12 of this subpart.

(5) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status according to §63.1574.

(6) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.1574.

(c) How do I demonstrate continuous compliance with the emission limitations and work practice standards? You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 8 and 9 of this subpart that applies to you according to the methods specified in Tables 13 and 14 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

84. **§63.1566 What are my requirements for organic HAP emissions from catalytic reforming units?**

(a) What emission limitations and work practice standards must I meet? You must:

(1) Meet each emission limitation in Table 15 of this subpart that applies to you. You can choose from the two options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to vent emissions of total organic compounds (TOC) to a flare that meets the control device requirements in §63.11(b) (Option 1); or

(ii) You can elect to use a control device to meet a TOC percent reduction standard or concentration limit, whichever is less stringent (Option 2).

(2) Comply with each site-specific operating limit in Table 16 of this subpart that applies to you.

(3) The emission limitations in Tables 15 and 16 of this subpart 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.

(4) The emission limitations in Tables 15 and 16 of this subpart 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.

(5) Prepare an operation, maintenance, and monitoring plan according to the requirements in §63.1574(f) and operate at all times according to the procedures in the plan.

(b) How do I demonstrate initial compliance with the emission limitations and work practice standard? You must:

(1) Install, operate, and maintain a continuous monitoring system(s) according to the requirements in §63.1572 and Table 17 of this subpart.

(2) Conduct each performance test for a catalytic reforming unit according to the requirements in §63.1571 and under the conditions specified in Table 18 of this subpart.

(3) Establish each site-specific operating limit in Table 16 of this subpart that applies to you according to the procedures in Table 18 of this subpart.

(4) Use the procedures in paragraph (b)(4)(i) or (ii) of this section to determine initial compliance with the emission limitations.

(i) If you elect 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:

$$E = K_4 \; M_c \; Q_s$$

(Eq. 1)

Where:

E = Emission rate of TOC in the vent stream, kilograms-C per hour;
K_4 = Constant, 6.0 x 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 to part 60 of this chapter, mg/dscm; and
Q_S = Vent stream flow rate, dscm/min, at a temperature of 20 degrees Celsius (C).

$$E = K_5 \; C_{TOC} \; Q_S$$

(Eq. 2)

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 to part 60 of this chapter; and
Q_S = Vent stream flow rate, dry standard cubic meters per minute, at a temperature of 20 degrees C.

$$\%\ reduction = \frac{E_i - E_o}{E_i} \; x \; 100\%$$

(Eq. 3)

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.

(5) If you elect 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:

$$C_{TOC,3\%O_2} = C_{TOC} \left(\frac{17.9\%}{20.9\% - \%O_2}\right)$$

(Eq. 4)

(6) You are not required to do a TOC performance test if:

(i) You elect to vent emissions to a flare as provided in paragraph (a)(1)(i) of this section (Option 1); or

(ii) You elect the TOC percent reduction or concentration limit in paragraph (a)(1)(ii) of this section (Option 2), and you use 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.

(7) Demonstrate initial compliance with each emission limitation that applies to you according to Table 19 of this subpart.

(8) Demonstrate initial compliance with the work practice standard in paragraph (a)(5) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status.

(9) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.1574.

(c) How do I demonstrate continuous compliance with the emission limitations and work practice standards? You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 15 and 16 of this subpart that applies to you according to the methods specified in Tables 20 and 21 of this subpart.

(2) Demonstrate continuous compliance with the work practice standards in paragraph (a)(3) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

85. §63.1567 What are my requirements for inorganic HAP emissions from catalytic reforming units?

(a) What emission limitations and work practice standards must I meet? You must:

(1) Meet each emission limitation in Table 22 of this subpart that applies to you. These emission limitations apply during coke burn-off and catalyst rejuvenation. You can choose from the two options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to use a control device to meet either a percent reduction standard for hydrogen chloride (HCl) emissions (Option 1); or

(ii) You can elect to meet an HCl concentration limit (Option 2).

(2) Meet each site-specific operating limit in Table 23 of this subpart that applies to you. These operating limits apply during coke burn-off and catalyst rejuvenation.

(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in §63.1574(f) and operate at all times according to the procedures in the plan.

(b) How do I demonstrate initial compliance with the emission limitations and work practice standard? You must: (1) Install, operate, and maintain a continuous monitoring system(s) according to the requirements in §63.1572 and Table 24 of this subpart.

(2) Conduct each performance test for a catalytic reforming unit according to the requirements in §63.1571 and the conditions specified in Table 25 of this subpart.

(3) Establish each site-specific operating limit in Table 23 of this subpart that applies to you according to the procedures in Table 25 of this subpart.

(4) Demonstrate initial compliance with each emission limitation that applies to you according to Table 26 of this subpart.

(5) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status.

(6) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.1574.

(c) How do I demonstrate continuous compliance with the emission limitations and work practice standard? You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 22 and 23 of this subpart that applies to you according to the methods specified in Tables 27 and 28 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by maintaining records to document conformance with the procedures in your operation, maintenance and monitoring plan.

86. **§63.1568 What are my requirements for HAP emissions from sulfur recovery units?**

(a) What emission limitations and work practice standard must I meet? You must:

(1) Meet each emission limitation in Table 29 of this subpart that applies to you. If your sulfur recovery unit is subject to the NSPS for sulfur oxides in §60.104 of this chapter, you must meet the emission limitations for NSPS units. If your sulfur recovery unit isn't subject to the NSPS for sulfur oxides, you can choose from the options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to meet the NSPS requirements (Option 1); or

(ii) You can elect to meet the total reduced sulfur (TRS) emission limitation (Option 2).

(2) Meet each operating limit in Table 30 of this subpart that applies to you.

(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in §63.1574(f) and operate at all times according to the procedures in the plan.

(b) How do I demonstrate initial compliance with the emission limitations and work practice standards? You must:

(1) Install, operate, and maintain a continuous monitoring system according to the requirements in §63.1572 and Table 31 of this subpart.

(2) Conduct each performance test for a sulfur recovery unit not subject to the NSPS for sulfur oxides according to the requirements in §63.1571 and under the conditions specified in Table 32 of this subpart.

(3) Establish each site-specific operating limit in Table 30 of this subpart that applies to you according to the procedures in Table 32 of this subpart.

(4) Correct the reduced sulfur samples to zero percent excess air using Equation 1 of this section as follows:

$$C_{adj} = C_{meas} \, [20.9_c/(20.9 - \%O_2)]$$

(Eq. 1)

Where:

C_{adj} = pollutant concentration adjusted to zero percent oxygen, ppm or g/dscm;
C_{meas} = pollutant concentration measured on a dry basis, ppm or g/dscm;
20.9_c = 20.9 percent oxygen - 0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent;
$\%O_2$ = oxygen concentration measured on a dry basis, percent.

(5) Demonstrate initial compliance with each emission limitation that applies to you according to Table 33 of this subpart.

(6) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your notification of compliance status.

(7) Submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in §63.1574.

(c) How do I demonstrate continuous compliance with the emission limitations and work practice standards? You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 29 and 30 of this subpart that applies to you according to the methods specified in Tables 34 and 35 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

87. **§63.1569 What are my requirements for HAP emissions from bypass lines?**

(a) What work practice standards must I meet?

(1) You must meet each work practice standard in Table 36 of this subpart that applies to you. You can choose from the four options in paragraphs (a)(1)(i) through (iv) of this section:

(i) You can elect to install an automated system (Option 1);

(ii) You can elect to use a manual lock system (Option 2);

(iii) You can elect to seal the line (Option 3); or

(iv) You can elect to vent to a control device (Option 4).

(2) As provided in §63.6(g), we, the EPA, may choose to grant you permission to use an alternative to the work practice standard in paragraph (a)(1) of this section.

(3) You must prepare an operation, maintenance, and monitoring plan according to the requirements in §63.1574(f) and operate at all times according to the procedures in the plan.

(b) How do I demonstrate initial compliance with the work practice standards? You must:

(1) If you elect the option in paragraph (a)(1)(i) of this section, conduct each performance test for a bypass line according to the requirements in §63.1571 and under the conditions specified in Table 37 of this subpart.

(2) Demonstrate initial compliance with each work practice standard in Table 36 of this subpart that applies to you according to Table 38 of this subpart.

(3) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your notification of compliance status.

(4) Submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in §63.1574.

(c) How do I demonstrate continuous compliance with the work practice standards? You must:

(1) Demonstrate continuous compliance with each work practice standard in Table 36 of this subpart that applies to you according to the requirements in Table 39 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(2) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

General Compliance Requirements

88. **§63.1570 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with all of the non-opacity standards in this subpart during the times specified in §63.6(f)(1).

(b) You must be in compliance with the opacity and visible emission limits in this subpart during the times specified in §63.6(h)(1).

(c) 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). During the period between the compliance date specified for your affected source and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(d) You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

(e) During periods of startup, shutdown, and malfunction, you must operate in accordance with your SSMP.

(f) You must report each instance in which you did not meet each emission limitation and each operating limit in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet the work practice standards in this subpart that apply to you. 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 §63.1575.

(g) 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 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 §63.6(e) and the contents of the SSMP.

89. **§63.1571 How and when do I conduct a performance test or other initial compliance demonstration?**

(a) When must I conduct a performance test? You must conduct performance tests and report the results by no later than 150 days after the compliance date specified for your source in §63.1563 and according to the provisions in §63.7(a)(2). If you are required to do a performance evaluation or test for a semi-regenerative catalytic reforming unit catalyst regenerator vent, you may do them at the first regeneration cycle after your compliance date and report the results in a followup Notification of Compliance Status report due no later than 150 days after the test. (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, you must conduct the initial compliance demonstration within 30 calendar days after the compliance date that is specified for your source in §63.1563.

(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 the compliance date that is specified for your source in §63.1563 and ends at 11:59 p.m., 30 calendar days after the compliance date that is specified for your source in §63.1563.

(3) If you commenced construction or reconstruction between September 11, 1998 and April 11, 2002, you must demonstrate initial compliance with either the proposed emission limitation or the promulgated emission limitation no later than October 8, 2002 or within 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(4) If you commenced construction or reconstruction between September 11, 1998 and April 11, 2002, and you chose to comply with the proposed emission limitation when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limitation by October 10, 2005, or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(b) What are the general requirements for performance test and performance evaluations? You must:

(1) Conduct each performance test according to the requirements in §63.7(e)(1).

(2) Except for opacity and visible emission observations, conduct three separate test runs for each performance test as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(3) Conduct each performance evaluation according to the requirements in §63.8(e).

(4) Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(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 §63.1564, and determining the arithmetic average of the calculated emission rates.

(c) What procedures must I use for an engineering assessment? You 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 you use an engineering assessment, you must document all data, assumptions, and procedures to the satisfaction of the applicable permitting authority. An engineering assessment may include the approaches listed in paragraphs (c)(1) through (c)(4) of this section. Other engineering assessments may be used but are subject to review and approval by the applicable permitting authority.

(1) You may use previous test results provided the tests are representative of current operating practices at the process unit, and provided EPA methods or approved alternatives were used;

(2) You may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

(3) You 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

(4) You may use design analysis based on engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

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

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

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

(d) Can I adjust the process or control device measured values when establishing an operating limit? If you do a performance test to demonstrate compliance, you must base the process or control device operating limits for continuous parameter monitoring systems on the results measured during the performance test. You may adjust the values measured during the performance test according to the criteria in paragraphs (d)(1) through (3) of this section.

(1) If you must meet the HAP metal emission limitations in §63.1564, you elect the option in paragraph (a)(1)(iii) in §63.1564 (Ni lb/hr), and you use continuous parameter monitoring systems, you 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 63.1564(b)(2) allows you to adjust the laboratory measurements of the equilibrium catalyst Ni concentration to the maximum level. You must make this adjustment using Equation 1 of this section as follows:

$$\text{Ecat-Limit} = \frac{13\ \text{g Ni/hr}}{\text{NiEmR1}_{st}} \times \text{Ecat}_{st}$$

(Eq. 1)

Where:

Ecat-Limit = Operating limit for equilibrium catalyst Ni concentration, mg/kg;

$NiEmR1_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 of this section for each performance test run, g Ni/hr; and

$Ecat_{st}$ = Average equilibrium Ni concentration from laboratory test results, mg/kg.

(2) If you must meet the HAP metal emission limitations in §63.1564, you elect the option in paragraph (a)(1)(iv) in §63.1564 (Ni lb/1,000 lb of coke burn-off), and you use continuous parameter monitoring systems, you 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 63.1564(b)(2) allows you to adjust the laboratory measurements of the equilibrium catalyst Ni concentration to the maximum level. You must make this adjustment using Equation 2 of this section as follows:

$$:at-Limit = \frac{1.0\ mg/kg\ coke\ burn-off}{NiEmR2_{st}}\ x\ Ecc$$

(Eq. 2)

Where:

$NiEmR2_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 of §63.1564 for each performance test run, mg/kg coke burn-off.

(3) If you choose to adjust the equilibrium catalyst Ni concentration to the maximum level, you can't adjust any other monitored operating parameter (i.e., gas flow rate, voltage, pressure drop, liquid-to-gas ratio).

(4) Except as specified in paragraph (d)(3) of this section, if you use continuous parameter monitoring systems, you may adjust one of your 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. You must provide supporting documentation and rationale in your Notification of Compliance Status, demonstrating to the satisfaction of your permitting authority, that your affected source complies with the applicable emission limit at the operating limit based on adjusted values.

(e) Can I change my operating limit? You may change the established operating limit by meeting the requirements in paragraphs (e)(1) through (3) of this section.

(1) You may change your established operating limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, you are in compliance with the applicable emission limitation.

(2) You must establish a revised operating limit for your continuous parameter monitoring system if you make any change in process or operating conditions that could affect control system performance or you change designated conditions after the last performance or compliance tests were done. You can establish the revised operating limit as described in paragraph (e)(1) of this section.

(3) You may change your site-specific opacity operating limit or Ni operating limit only by doing a new performance test.

90. **<u>§63.1572 What are my monitoring installation, operation, and maintenance requirements</u>?**

(a) You must install, operate, and maintain each continuous emission monitoring system according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) You must install, operate, and maintain each continuous emission monitoring system according to the requirements in Table 40 of this subpart.

(2) If you use a continuous emission monitoring system to meet the NSPS CO or SO_2 limit, you must conduct a performance evaluation of each continuous emission monitoring system according to the requirements in §63.8 and Table 40 of this subpart. This requirement does not apply to an affected source subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

(3) As specified in §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.

(4) Data must be reduced as specified in §63.8(g)(2).

(b) You must install, operate, and maintain each continuous opacity monitoring system according to the requirements in paragraphs (b)(1) through (3) of this section.

(1) Each continuous opacity monitoring system must be installed, operated, and maintained according to the requirements in Table 40 of this subpart.

(2) If you use a continuous opacity monitoring system to meet the NSPS opacity limit, you must conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in §63.8 and Table 40 of this subpart. This requirement does not apply to an affected source subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

(3) As specified in §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) You must install, operate, and maintain each continuous parameter monitoring system according to the requirements in paragraphs (c)(1) through (7) of this section.

(1) Each continuous parameter monitoring system must be installed, operated, and maintained according to the requirements in Table 41 of this subpart and in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

(2) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You 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).

(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.

(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.

(5) Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

(d) You must monitor and collect data according to the requirements in paragraphs (d)(1) and (2) of this section.

(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), you must

conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected source is operating.

(2) You 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. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

91. **§63.1573 What are my monitoring alternatives?**

(a) What is the approved alternative for monitoring gas flow rate? You can elect to use this alternative to a continuous parameter monitoring system for the catalytic regenerator exhaust gas flow rate for your 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 you select this alternative, you must use the same procedure for the performance test and for monitoring after the performance test.

(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, you can determine and record the hourly average volumetric air flow rate to the catalytic cracking unit regenerator using the catalytic cracking unit control room instrumentation.

(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 you do not use an add-on control device).

(3) Calculate and record the hourly average actual exhaust gas flow rate using Equation 1 of this section as follows:

$$Q_{gas} = (1.12\ scfm/dscfm) \times (Q_{air} + Q_{oxy}) \times \left(\frac{Temp_{gas}}{273°K}\right) \times \left(\frac{P_{vent}}{1\ atm.}\right)$$

(Eq.1)

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) What is the approved alternative for monitoring pH levels? If you use a wet scrubber to control inorganic HAP emissions from your vent on a catalytic reforming unit, you 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 of this subpart.

(c) Can I use another type of monitoring system? You may request approval from your 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. Your 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 paragraphs (c)(1) through (5) of this section:

(1) The system measures the operating parameter value at least once every hour;

(2) The system records at least 24 values each day during periods of operation;

(3) The system records the date and time when monitors are turned off or on;

(4) The system recognizes unchanging data that may indicate the monitor is not functioning properly, alerts the operator, and records the incident; and

(5) The system computes daily average values of the monitored operating parameter based on recorded data.

(d) Can I monitor other process or control device operating parameters? You may request approval to monitor parameters other than those required in this subpart. You must request approval if:

(1) You use a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

(2) You use 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

(3) You wish 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) How do I request to monitor alternative parameters? You must submit a request for review and approval or disapproval to the Administrator. The request must include the information in paragraphs (e)(1) through (5) of this section.

(1) A description of each affected source and the parameter(s) to be monitored to determine whether the affected source will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

(2) A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine whether the affected source will continuously comply with the emission limitations and the schedule for this demonstration. You must certify that you will establish an operating limit 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.

(3) The frequency and content of monitoring, recording, and reporting, if monitoring and recording are not continuous. You also must include the rationale for the proposed monitoring, recording, and reporting requirements.

(4) Supporting calculations.

(5) Averaging time for the alternative operating parameter.

Notifications, Reports, and Records

92. **<u>§63.1574 What notifications must I submit and when</u>?**

(a) Except as allowed in paragraphs (a)(1) through (3) of this section, you must submit all of the notifications in §§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 you by the dates specified.

(1) You must submit the notification of your intention to construct or reconstruct according to §63.9(b)(5) unless construction or reconstruction had commenced and initial startup had not occurred before April 11, 2002. In this case, you must submit the notification as soon as practicable before startup but no later than July 10, 2002. 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 §§63.5(d)(1)(i) and 63.5(f)(2).

(2) You must submit the notification of intent to conduct a performance test required in §63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

(3) If you are required to conduct a performance test, performance evaluation, design evaluation, opacity observation, visible emission observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii). You 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. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, you must provide a duplicate notification to the applicable Regional Administrator. If the required information has been submitted previously, you do not have to provide a separate notification of compliance status. Just refer to the earlier submissions instead of duplicating and resubmitting the previously submitted information.

(i) For each initial compliance demonstration that does not include a performance test, you must submit the Notification of Compliance Status no later than 30 calendar days following completion of the initial compliance demonstration.

(ii) For each initial compliance demonstration that includes a performance test, you must submit the notification of compliance status, including the performance test results, no later than 150 calendar days after the compliance date specified for your affected source in §63.1573.

(b) As specified in §63.9(b)(2), if you startup your new affected source before April 11, 2002, you must submit the initial notification no later than August 9, 2002.

(c) As specified in §63.9(b)(3), if you start your new or reconstructed affected source on or after April 11, 2002, you must submit the initial notification no later than 120 days after you become subject to this subpart.

(d) You also must include the information in Table 42 of this subpart in your notification of compliance status.

(e) If you request an extension of compliance for an existing catalytic cracking unit as allowed in §63.1563(c), you must submit a notification to your permitting authority containing the required information by October 13, 2003.

(f) As required by this subpart, you must prepare and implement an operation, maintenance, and monitoring plan for each affected source, control system, and continuous monitoring system. The purpose of this plan is to detail the operation, maintenance, and monitoring procedures you will follow.

(1) You must submit the plan to your permitting authority for review and approval along with your notification of compliance status. While you do not have to include the entire plan in your part 70 or 71 permit, you must include the duty to prepare and implement the plan as an applicable requirement in your part 70 or 71 operating permit. You must submit any changes to your permitting authority for review and approval and comply with the plan until the change is approved.

(2) Each plan must include, at a minimum, the information specified in paragraphs (f)(2)(i) through (x) of this section.

(i) Process and control device parameters to be monitored for each affected source, along with established operating limits.

(ii) Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(iii) Procedures that you will use to determine the coke burn-rate, the volumetric flow rate (if you use process data rather than direct measurement), and the rate of combustion of liquid or solid fossil fuels if you use an incinerator-waste heat boiler to burn the exhaust gases from a catalyst regenerator.

(iv) Procedures and analytical methods you will use to determine the equilibrium catalyst Ni concentration, the equilibrium catalyst Ni concentration monthly rolling average, and the hourly or hourly average Ni operating value.

(v) Procedures you will use to determine the pH of the water (or scrubbing liquid) exiting a wet scrubber if you use pH strips.

(vi) Procedures you 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).

(vii) Procedures you will use to determine the gas flow rate for a catalytic cracking unit if you use the alternative procedure based on air flow rate and temperature.

(viii) Monitoring schedule, including when you will monitor and when you will not monitor an affected source (e.g., during the coke burn-off, regeneration process).

(ix) Quality control plan for each continuous opacity monitoring system and continuous emission monitoring system you use to meet an emission limit in this subpart. This plan must include procedures you will use for calibrations, accuracy audits, and adjustments to the system needed to meet applicable requirements for the system.

(x) Maintenance schedule for each affected source, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

93. **§63.1575 What reports must I submit and when?**

(a) You must submit each report in Table 43 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule, you must submit each report by the date in Table 43 of this subpart and according to the requirements in paragraphs (b)(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 §63.1563 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 your affected source in §63.1563.

(2) 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 §63.1563.

(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 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 part 70 or 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to §70.6(a) (3)(iii)(A) or §71.6(a)(3)(iii)(A) of this chapter, you may submit the first and subsequent compliance

reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (4) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there are no deviations from any emission limitation that applies to you 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) For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation or work practice standard in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (3) of this section and the information in paragraphs (d)(1) through (3) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(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) For each deviation from an emission limitation occurring at an affected source where you are using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation, you must include the information in paragraphs (d)(1) through (3) of this section and the information in paragraphs (e)(1) through (13) of this section.

(1) The date and time that each malfunction started and stopped.

(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.

(3) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in §63.8(c)(8).

(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.

(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 source operating time during that reporting period.

(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.

(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 source operating time during that reporting period.

(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.

(9) An identification of each HAP that was monitored at the affected source.

(10) A brief description of the process units.

(11) The monitoring equipment manufacturer(s) and model number(s).

(12) The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

(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) You also must include the information required in paragraphs (f)(1) through (2) of this section in each compliance report, if applicable.

(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, you 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.

(2) Any requested change in the applicability of an emission standard (e.g., you want to change 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 your periodic report. You must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

(g) You may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

(h) The reporting requirements in paragraphs (h)(1) and (2) of this section apply to startups, shutdowns, and malfunctions:

(1) When actions taken to respond are consistent with the plan, you are not required to report these events in the semiannual compliance report and the reporting requirements in §§63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

(2) When actions taken to respond are not consistent with the plan, you must report these events and the response taken in the semiannual compliance report. In this case, the reporting requirements in §§63.6(e)(3)(iv) and
63.10(d)(5) do not apply.

(i) If the applicable permitting authority has approved a period of planned maintenance for your catalytic cracking unit according to the requirements in paragraph (j) of this section, you must include the following information in your compliance report.

(1) In the compliance report due for the 6-month period before the routine planned maintenance is to begin, you must include a full copy of your written request to the applicable permitting authority and written approval received from the applicable permitting authority.

(2) In the compliance report due after the routine planned maintenance is complete, you must include a description of the planned routine maintenance that was performed for the control device during the previous 6-

month period, and the total number of hours during those 6 months that the control device did not meet the emission limitations and monitoring requirements as a result of the approved routine planned maintenance.

(j) If you own or operate multiple catalytic cracking units that are served by a single wet scrubber emission control device (e.g., a Venturi scrubber), you may request the applicable permitting authority to approve a period of planned routine maintenance for the control device needed to meet requirements in your operation, maintenance, and monitoring plan. You must present data to the applicable permitting authority demonstrating that the period of planned maintenance results in overall emissions reductions. During this pre-approved time period, the emission control device may be taken out of service while maintenance is performed on the control device and/or one of the process units while the remaining process unit(s) continue to operate. During the period the emission control device is unable to operate, the emission limits, operating limits, and monitoring requirements applicable to the unit that is operating and the wet scrubber emission control device do not apply. The applicable permitting authority may require that you take specified actions to minimize emissions during the period of planned maintenance.

(1) You must submit a written request to the applicable permitting authority at least 6 months before the planned maintenance is scheduled to begin with a copy to the EPA Regional Administrator.

(2) Your written request must contain the information in paragraphs (j)(2)(i) through (v) of this section.

(i) A description of the planned routine maintenance to be performed during the next 6 months and why it is necessary.

(ii) The date the planned maintenance will begin and end.

(iii) A quantified estimate of the HAP and criteria pollutant emissions that will be emitted during the period of planned maintenance.

(iv) An analysis showing the emissions reductions resulting from the planned maintenance as opposed to delaying the maintenance until the next unit turnaround.

(v) Actions you will take to minimize emissions during the period of planned maintenance.

94. §63.1576 What records must I keep, in what form, and for how long?

(a) You must keep the records specified in paragraphs (a)(1) through (3) 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)(2)(xiv).

(2) The records in §63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity and visible emission observations as required in §63.10(b)(2)(viii).

(b) For each continuous emission monitoring system and continuous opacity monitoring system, you must keep the records required in paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (i.e., superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in §63.8(f)(6)(i).

(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) You must keep the records in §63.6(h) for visible emission observations.

(d) You must keep records required by Tables 6, 7, 13, and 14 of this subpart (for catalytic cracking units); Tables 20, 21, 27 and 28 of this subpart (for catalytic reforming units); Tables 34 and 35 of this subpart

(for sulfur recovery units); and Table 39 of this subpart (for bypass lines) to show continuous compliance with each emission limitation that applies to you.

(e) You must keep a current copy of your operation, maintenance, and monitoring plan onsite and available for inspection. You also must keep records to show continuous compliance with the procedures in your operation, maintenance, and monitoring plan.

(f) You 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) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(h) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(i) 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 offsite for the remaining 3 years.

Other Requirements and Information

95. §63.1577 What parts of the General Provisions apply to me?

Table 44 of this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

96. §63.1578 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that Agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office 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 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (5) of this section.

(1) Approval of alternatives to the non-opacity emission limitations and work practice standards in §§63.1564 through 63.1569 under §63.6(g).

(2) Approval of alternative opacity emission limitations in §§63.1564 through 63.1569 under §63.6(h)(9).

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major alternatives to record keeping and reporting under §63.10(f) and as defined in §63.90.

97. §63.1579 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, the General Provisions of this part (§§ 63.1 through 63.15), and in this section as listed.

Boiler means any enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator.

Catalytic cracking unit means a refinery process unit in which petroleum derivatives are continuously charged; hydrocarbon molecules in the presence of a catalyst suspended in a fluidized bed are fractured into smaller molecules, or react with a contact material suspended in a fluidized bed to improve feedstock quality for additional processing; and the catalyst or contact material is continuously regenerated by burning off coke and other deposits. The unit includes, but is not limited to, the riser, reactor, regenerator, air blowers, spent catalyst or contact material stripper, catalyst or contact material recovery equipment, and regenerator equipment for controlling air pollutant emissions and equipment used for heat recovery.

Catalytic cracking unit catalyst regenerator means one or more regenerators (multiple regenerators) which comprise that portion of the catalytic cracking unit in which coke burn-off and catalyst or contact material regeneration occurs and includes the regenerator combustion air blower(s).

Catalytic reforming unit means a refinery process unit that reforms or changes the chemical structure of naphtha into higher octane aromatics through the use of a metal catalyst and chemical reactions that include dehydrogenation, isomerization, and hydrogenolysis. The catalytic reforming unit includes the reactor, regenerator (if separate), separators, catalyst isolation and transport vessels (e.g., lock and lift hoppers), recirculation equipment, scrubbers, and other ancillary equipment.

Catalytic reforming unit regenerator means one or more regenerators which comprise that portion of the catalytic reforming unit and ancillary equipment in which the following regeneration steps typically are performed: depressurization, purge, coke burn-off, catalyst rejuvenation with a chloride (or other halogenated) compound(s), and a final purge. The catalytic reforming unit catalyst regeneration process can be done either as a semi-regenerative, cyclic, or continuous regeneration process.

Coke burn-off means the coke removed from the surface of the catalytic cracking unit catalyst or the catalytic reforming unit catalyst by combustion in the catalyst regenerator. The rate of coke burn-off is calculated using Equation 2 in §63.1564.

Combustion device means an individual unit of equipment such as a flare, incinerator, process heater, or boiler used for the destruction of organic HAP or VOC.

Combustion zone means the space in an enclosed combustion device (e.g., vapor incinerator, boiler, furnace, or process heater) occupied by the organic HAP and any supplemental fuel while burning. The combustion zone includes any flame that is visible or luminous as well as that space outside the flame envelope in which the organic HAP continues to be oxidized to form the combustion products.

Contact material means any substance formulated to remove metals, sulfur, nitrogen, or any other contaminants from petroleum derivatives.

Continuous regeneration reforming means a catalytic reforming process characterized by continuous flow of catalyst material through a reactor where it mixes with feedstock, and a portion of the catalyst is continuously removed and sent to a special regenerator where it is regenerated and continuously recycled back to the reactor.

Control device means any equipment used for recovering, removing, or oxidizing HAP in either gaseous or solid form. Such equipment includes, but is not limited to, condensers, scrubbers, electrostatic precipitators, incinerators, flares, boilers, and process heaters.

Cyclic regeneration reforming means a catalytic reforming process characterized by continual batch regeneration of catalyst in situ in any one of several reactors (e.g., 4 or 5 separate reactors) that can be isolated from and returned to the reforming operation while maintaining continuous reforming process operations (i.e., feedstock continues flowing through the remaining reactors without change in feed rate or product octane).

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 emission limit, 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 emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit, opacity limit, operating limit, or visible emission limit.

Flame zone means the portion of a combustion chamber of a boiler or process heater occupied by the flame envelope created by the primary fuel.

Flow indicator means a device that indicates whether gas is flowing, or whether the valve position would allow gas to flow, in or through a line.

Fuel gas system means the offsite and onsite piping and control system that gathers gaseous streams generated by the source, may blend them with sources of gas, if available, and transports the blended gaseous fuel at suitable pressures for use as fuel in heaters, furnaces, boilers, incinerators, gas turbines, and other combustion devices located within or outside of the refinery. The fuel is piped directly to each individual combustion device, and the system typically operates at pressures over atmospheric. The gaseous streams can contain a mixture of methane, light hydrocarbons, hydrogen, and other miscellaneous species.

HCl means for the purposes of this subpart, gaseous emissions of hydrogen chloride that serve as a surrogate measure for total emissions of hydrogen chloride and chlorine as measured by Method 26 or 26A in appendix A to part 60 of this chapter or an approved alternative method.

Incinerator means an enclosed combustion device that is used for destroying organic compounds, with or without heat recovery. Auxiliary fuel may be used to heat waste gas to combustion temperatures. An incinerator may use a catalytic combustion process where a substance is introduced into an exhaust stream to burn or oxidize contaminants while the substances itself remains intact, or a thermal process which uses elevated temperatures as a primary means to burn or oxidize contaminants.

Ni means, for the purposes of this subpart, particulate emissions of nickel that serve as a surrogate measure for total emissions of metal HAP, including but not limited to: antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium as measured by Method 29 in appendix A to part 60 of this chapter or by an approved alternative method.

Oxidation control system means an emission control system which reduces emissions from sulfur recovery units by converting these emissions to sulfur dioxide.

PM means, for the purposes of this subpart, emissions of particulate matter that serve as a surrogate measure of the total emissions of particulate matter and metal HAP contained in the particulate matter, including but not limited to: antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium as measured by Methods 5B or 5F in appendix A to part 60 of this chapter or by an approved alternative method.

Process heater means an enclosed combustion device that primarily transfers heat liberated by burning fuel directly to process streams or to heat transfer liquids other than water.

Process vent means, for the purposes of this subpart, a gas stream that is continuously or periodically discharged during normal operation of a catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit, including gas streams that are discharged directly to the atmosphere, gas streams that are routed to a control device prior to discharge to the atmosphere, or gas streams that are diverted through a product recovery device line prior to control or discharge to the atmosphere.

Reduced sulfur compounds means hydrogen sulfide, carbonyl sulfide, and carbon disulfide.

Reduction control system means an emission control system which reduces emissions from sulfur recovery units by converting these emissions to hydrogen sulfide.

Responsible official means responsible official as defined in 40 CFR 70.2.

Semi-regenerative reforming means a catalytic reforming process characterized by shutdown of the entire reforming unit (e.g., which may employ three to four separate reactors) at specified intervals or at the owner's or operator's convenience for in situ catalyst regeneration.

Sulfur recovery unit means a process unit that recovers elemental sulfur from gases that contain reduced sulfur compounds and other pollutants, usually by a vapor-phase catalytic reaction of sulfur dioxide and hydrogen sulfide. This definition does not include a unit where the modified reaction is carried out in a water solution which contains a metal ion capable of oxidizing the sulfide ion to sulfur, e.g., the LO-CAT II process.

TOC means, for the purposes of this subpart, emissions of total organic compounds, excluding methane and ethane, that serve as a surrogate measure of the total emissions of organic HAP compounds, including but not limited to, acetaldehyde, benzene, hexane, phenol, toluene, and xylenes and non-HAP VOC as measured by Method 25 or 25A in appendix A to part 60 of this chapter or an approved alternative method.

TRS means, for the purposes of this subpart, emissions of total reduced sulfur compounds, expressed as an equivalent sulfur dioxide concentration, that serve as a surrogate measure of the total emissions of sulfide HAP carbonyl sulfide and carbon disulfide as measured by Method 15 in appendix A to part 60 of this chapter or by an approved alternative method.

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.

98. Tables to 40 CFR Part 63, Subpart UUU

TABLE 1 TO Subpart UUU OF PART 63.—METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(1), you shall meet each emission limitation in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	You shall meet the following emission limits for each catalyst regenerator vent * *
1. Subject to the new source performance standard (NSPS) for PM in 40 CFR 60.102.	PM emissions shall not exceed 1.0 kilogram (kg) per 1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions shall not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.
2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR 60.102.	PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000

3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102. 4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. 5. Option 4: Ni Lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102.	lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or in supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 g/MJ or lb/ million Btu of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions shall not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period. PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. Nickel (Ni) emissions shall not exceed 13,000 milligrams per hour (mg/hr) (0.029 lb/ hr). Ni emissions shall not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.

TABLE 2 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(2), you shall meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You shall meet this operating limit * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	Continuous opacity monitoring system.	Not applicable	Not applicable.
2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR 60.102.	Continuous opacity monitoring system.	Not applicable	Not applicable.
3. Option 2: PM limit not	a. Continuous opacity monitoring	Electrostatic precipitator	Maintain the hourly average opacity of emissions from your catalyst regenerator vent

subject to the NSPS for PM in 40 CFR 60.102.	system.	Electrostatic precipitator	no higher than the site-specific opacity limit established during the performance test.
	b. Continuous parameter monitoring systems.	Wet scrubber	Maintain the daily average gas flow rate no higher than the limit established in the performance test; and maintain the daily average voltage and secondary current (or total power input) above the limit established in the performance test.
	c. Continuous parameter monitoring systems.	Electrostatic precipitator	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.	i. Electrostatic precipitator	
	b. Continuous parameter monitoring systems.		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
(Continued)			

			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 shall meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You shall meet this operating limit * * *
		ii. Wet scrubber	Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design);and maintain the daily average liquid-to-gas ratio above the limit established during the performance test.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system	Electrostatic precipitator	
	b. Continuous parameter monitoring systems.	i. Electrostatic precipitator	Maintain the daily average Ni operating value no higher than the Ni operating limit established during the performance test.
		ii. Wet scrubber	Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; 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.—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM
CATALYTIC CRACKING UNITS
[As stated in § 63.1564(b)(1), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You shall install, operate, and maintain a * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	Any size	Electrostatic precipitator or wet scrubber or no control device.	CONTINUOUS opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
2. Option 1: NSPS limits not subject to the NSPS for PM in 40 CFR 60.102.	Any size	Electrostatic precipitator or wet scrubber or no control device.	Continuous opacity monitoring system to measure and record the opacity of emissions from
3. Option 2: PM limit not	a. Over 20,000 barrels		

subject to the NSPS for PM in 40 CFR 60.102.	per day fresh feed capacity.	Electrostatic precipitator	each catalyst regenerator vent. CONTINUOUS opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent;
	c. Any size	i. Wet scrubber	or continuous parameter monitoring systems to measure and record the gas flow rate to the control device and the voltage and secondary current (or total power input) to the control device. (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.
	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.	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	(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.
(Continued)			CONTINUOUS opacity

			monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. CONTINUOUS opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.

Continued) TABLE 3 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You shall install, operate, and maintain a * * *
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate; or continuous parameter monitoring systems to measure and record the gas flow rate and the voltage and secondary
	c. Any size	Wet scrubber	

			current (or total power input) to the control device.
	d. Any size	No electrostatic precipitator or 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.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102.	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	(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.
	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. 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. 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.

Continued) TABLE 3 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You shall install, operate, and maintain a * * *
	c. Any size	Wet scrubber	Continuous parameter monitoring

	d. Any size	No electrostatic precipitator or wet scrubber	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. Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.

TABLE 4 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)

[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You shall * * *	Using * * *	According to these requirements * * *
1. If you elect Option 1 in item 2 of Table 1, Option 2 in item 3 of Table 1, Option 3 in item 4 of Table 1, or Option 4 in item 5 of	a. Select sampling port's location and the number of traverse ports. b. Determine velocity	Method 1 or 1A in Appendix A to part 60 of this chapter. Method 2, 2A, 2C, 2D, 2F, or 2G	Sampling sites shall be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior

Table 1 of this subpart.	and volumetric flow rate. c. Conduct gas molecular weight analysis. d. Measure moisture content of the stack gas. 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.	in Appendix A to part 60 of this chapter, as applicable. Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable. Method 4 in Appendix A to part 60 of this chapter.	to any releases to the atmosphere.
2. Option 1: Elect NSPS	a. Measure PM emissions ..... b. Compute PM emission rate (lbs/1,000 lbs) of coke burn-off.	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. Equations 1, 2, and 3 of § 63.1564 (if applicable). Continuous opacity	You shall maintain a sampling rate of at least 0.15 dry standard cubic meters per minute (dscm/min) (0.53 dry standard cubic feet per minute (dscf/min)). You shall collect opacity monitoring

3. Option 2: PM limit	c. Measure opacity of emissions.	monitoring system.	data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages.
(Continued)	a. Measure PM emissions ..... b. Compute coke burn-off rate and PM emission rate.	See item 2. of this table ..... Equations 1 and 2 of § 63.1564	See item 2. of this table.

(Continued) TABLE 4 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You shall * * *	Using * * *	According to these requirements * * *
4. Option 3: Ni lb/hr	c. Establish your site-specific opacity operating limit if you use a continuous opacity monitoring system. a. Measure concentration of Ni and total metal HAP. b. Compute Ni emission rate (lb/hr).	Data from the continuous opacity monitoring system. Method 29 (40 CFR Part 60, Appendix A). Equation 5 of § 63.1564 EPA Method 6010B or 6020 or EPA Method 7520 or	You shall collect opacity monitoring data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages; determine and record the hourly average opacity from all the 6-minute averages; and compute the site-specific limit using Equation 4 of § 63.1564. You shall maintain a sampling rate of at least 0.028 dscm/min (0.74

	c. Determine the equilibrium catalyst Ni concentration.	7521 in SW–846 1; or, you can use an alternative method satisfactory to the Administrator.	dscf/min). You shall obtain 1 sample for each of the 3 runs; determine and record the average equilibrium catalyst Ni concentration for each of the 3 runs; and you may adjust the results for an individual run to the maximum value using Equation 1 of § 63.1571.
5. Option 4: Ni lbs/1,000 lbs of coke burn-off. *(Continued)*	d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit. a. Measure concentration of Ni and total metal HAP. b. Compute Ni emission rate (lb/ 1,000 lbs of coke burn-off). c. Determine the equilibrium catalyst Ni concentration.	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. Method 29 (40 CFR Part 60, Appendix A). 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	(1) You shall collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute averages. (2) You shall collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate from all the readings. You shall maintain a

		satisfactory to the Administrator.	sampling rate of at least 0.028 dscm/min (0.74 dscf/min). You shall 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 SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You shall * * *	Using * * *	According to these requirements * * *
	d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit.	i. Equations 9 and 10 of § 63.1564 with data from continuous opacity monitoring system, coke burn-off rate, gas flow rate, results of equilibrium catalyst Ni concentration analysis, and Ni emission rate from Method 29 test.	(1) You shall collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute

			averages. (2) You shall collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow rate as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate from all the readings.
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.	e. Record the catalyst addition rate for each test and schedule for the 10-day period prior to the test. 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.	
	c. Electrostatic precipitator: voltage and secondary current (or total power input).	Data from the continuous parameter monitoring systems and applicable performance test methods.	You shall collect gas flow rate monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the maximum hourly average gas flow rate from all the readings.
	d. Electrostatic precipitator or wet	Results of analysis for equilibrium catalyst Ni concentration.	You shall collect voltage

(Continued)	scrubber: equilibrium catalyst Ni concentration. e. Wet scrubber: pressure drop (not applicable to non-venturi scrubber of jet ejector design).	Data from the continuous parameter monitoring systems and applicable performance test methods	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 shall determine and record the average equilibrium catalyst Ni concentration for the 3 runs based on the laboratory results. You may adjust the value using Equation 1 or 2 of § 63.1571 as applicable. You shall collect pressure drop monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the minimum hourly average pressure drop from all the readings.

(Continued) TABLE 4 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You shall * * *	Using * * *	According to these requirements * * *

	f. Wet scrubber: liquid-to-gas ratio	Data from the continuous parameter monitoring systems and applicable performance test methods.	You shall collect gas flow rate and total water (or scrubbing liquid) flow rate monitoring data every 15 minutes during the entire period of the initial performance test; determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate from all the readings; and determine and record the minimum liquid-to-gas ratio
	g. Alternative procedure for gas flow rate.	Data from the continuous parameter monitoring systems and applicable performance test methods.	You shall collect air flow rate monitoring data or determine the air flow rate using control room instrumentation every 15 minutes during the entire period of the initial performance test; determine and record the hourly average rate of all the readings; and determine and record the maximum gas flow rate using Equation 1 of § 63.1573.

TABLE 5 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC

CRACKING UNITS

[As stated in § 63.1564(b)(5), you shall meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit catalyst regenerator vent * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM emission rate is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator. As part of the Notification of Compliance Status, you shall certify that your vent meets the PM limit. You are not required to do another performance test to demonstrate initial compliance. If applicable, you have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM rate is less than or equal to 43.0 g/MJ or 0.010 lb/million Btu of heat input attributable to the liquid or solid fossil fuel. As part of the Notification of Compliance Status, you shall certify that your vent meets the PM emission limit. You are not required to do another

2. Option 1: Elect NSPS not subject to the NSPS for PM. *(Continued on next page)*	PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions shall not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	performance test to demonstrate initial compliance. You have already conducted a performance test to demonstrate initial compliance with the NSPS and the average hourly opacity of emissions is no more than 30 percent. Except: one 6-minute average in any 1-hour period can exceed 30 percent. As part of the Notification of Compliance Status, you shall certify that your vent meets the opacity limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you certify that your continuous opacity monitoring system meets the requirements in § 63.1572. You are not required to do a performance evaluation to demonstrate initial compliance. 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 shall meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit catalyst regenerator vent * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
3. Option 2: not subject to the NSPS for PM	PPM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator.	The average PM emission rate, measured using EPA Method 5 over the period of the initial performance test, is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst

4. Option 3: not subject to the NSPS for PM	Nickel (Ni) emissions from your catalyst regenerator vent shall not exceed 13,000 mg/hr (0.029 lb/hr).	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.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM.	Ni emissions from your catalyst regenerator vent shall not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.	The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 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. The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The Ni emission rate is calculated using Equation 8 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572.

TABLE 6 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you shall meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	Subject to this emission limit for your catalyst regenerator vent * * *	You shall demonstrate continuous compliance by * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	a. PM emissions shall not exceed 1.0 lb/ 1,000 lbs of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, incremental rate of PM can't exceed 43.0 g/MJ (0.10 lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and opacity of emissions can't exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	i. Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) using Equation 2 in § 63.1564 and the hours of operation for each catalyst regenerator; maintaining PM emission rate below 1.0 kg/1,000 kg (1.0 lb/ 1,000 lbs) of coke burn-off; if applicable, determining and recording each day the rate of combustion of liquid or solid fossil fuels (liters/hour or kilograms/hour) using Equation 3 of § 63.1564 and the hours of operation during which liquid or solid fossil fuels are combusted in the incinerator waste heat boiler; if applicable, maintaining PM rate below 43 g/MJ (0.10 lb/million Btu) of heat input attributable to the solid or liquid fossil fuel; collecting the continuous opacity monitoring data for each catalyst regenerator vent according to § 63.1572; and maintaining each 6-minute average at or below 30 percent except that one 6-minute average during a 1-hour period can exceed 30 percent.
2. Option 1: Elect NSPS not subject to the NSPS for PM in 40 CFR 60.102.	See item 1.a. of this table	
3. Option 2: PM limit not subject to the NSPS for PM.	PM emissions shall not exceed 1.0	See item 1.a.i. of this table.

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.	lb/1,000 lbs of coke burn-off in the catalyst regenerator. Ni emissions shall not exceed 13,000 mg/hr (0.029 lb/hr). Ni emissions shall not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.	Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) and the hours of operation for each catalyst regenerator by Equation 2 of § 63.1564. You can use process data to determine the volumetric flow rate; and maintaining 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 shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You shall demonstrate continuous compliance by * * *
1. Subject to NSPS for PM in 40 CFR 60.102. 2. Option 1: Elect NSPS	Continuous opacity monitoring system. Continuous opacity	Not applicable	Complying with Table 6 of this subpart. Complying with Table 6 of

not subject to the NSPS for PM in 40 CFR 60.102.	monitoring system.	Not applicable	this subpart.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system.	The opacity of emissions from your catalyst regenerator vent shall not exceed the site-specific opacity operating limit established during the performance test	Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; and maintaining each 6-minute average in each 1-hour period at or below the site-specific limit.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device shall not exceed the operating limit established during the performance test.	Collecting the hourly and daily average gas flow rate monitoring data according to § 63.1572 1; and maintaining the daily average gas flow rate at limit or below the established during the performance test.
	c. Continuous parameter monitoring systems—wet scrubber.	ii. The daily average voltage and secondary current (or total power input) to the control device shall not fall below the operating limit established during the performance test	Collecting the hourly and daily average voltage and secondary current (or total power input) monitoring data according to § 63.1572; and maintaining the daily average voltage and secondary current (or total power input) at or above the limit established during the performance test.
		i. The daily average pressure drop across the scrubber shall not fall below the operating limit established during the	Collecting the hourly and daily average pressure drop monitoring data according to §

(Continued on next page)		performance test. ii. The daily average liquid-to-gas ratio shall not fall below the operating limit established during the performance test.	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.

(Cont.) TABLE 7 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You shall demonstrate continuous compliance by * * *
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system.	The daily average Ni operating value shall not exceed the site-specific Ni operating limit established during the performance test.	Collecting the hourly average continuous opacity monitoring system data according § 63.1572; determining and recording equilibrium

			catalyst Ni concentration at least once a week collecting the hourly average gas flow rate monitoring data according to § 63.1572[1]; determining and recording the hourly average Ni operating value using Equation 11 of § 63.1564; determining and recording
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device shall notice exceed the level established in the performance test.	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.
		ii. The daily average voltage and secondary current (or total power input) shall not fall below the level established in the performance test.	See item 3.b.i. of this table. See item 3.b.ii. of this table.
	c. Continuous parameter monitoring systems—wet scrubber.	iii. The monthly rolling average of equilibrium catalyst Ni concentration shall not exceed the level established during the performance test.	Determining the recording the equilibrium catalyst Ni concentration at least once a week; determining and recording the monthly rolling average of the equilibrium catalyst Ni concentration once each week using the weekly or most recent value; and maintaining the monthly rolling average below the limit established in the performance test
		i. The daily average pressure drop shall not fall below the operating limit established in the performance test.	
		ii. The daily average	

(Continued on next page)		liquid-to-gas ratio shall not fall below the operating limit established during the performance test. iii. The monthly rolling average equilibrium catalyst Ni concentration shall not exceed the level established during the performance test.	See item 3.c.i. of this table. See item 3.c.ii. of this table. 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.

(Cont.) TABLE 7 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP
EMISSIONS FROM CATALYTIC CRACKING UNITS
[As stated in § 63.1564(c)(1), you shall meet each requirement in the following table that applies to you

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You shall demonstrate continuous compliance by * * *
5. Option 4: Ni lb/ton of coke burnoff not subject to the NSPS for PM in 40 CFR 60.102	a. Continuous opacity monitoring system.	The daily average Ni operating value shall not exceed the site specific Ni operating limit established during the performance test.	Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; collecting the hourly average gas flow rate monitoring data according to § 63.1572 1; determining and recording equilibrium catalyst Ni concentration at least once a week; determining and recording the hourly average

			Ni operating value using Equation 12 of § 63.1564; determining and recording the daily average Ni operating value; and maintaining the daily average Ni operating value below the site-specific Ni operating limit established during the performance test.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device shall not exceed the level established in the performance test.	See item 3.b.i. of this table.
		ii. The daily average voltage and secondary current (or total power input) shall not fall below the level established in the performance test.	See item 3.b.ii. of this table.
	c. Continuous parameter monitoring systems—wet scrubber.	iii. The monthly rolling average equilibrium catalyst Ni concentration shall not exceed the level established during the performance test.	See item 4.b.iii. of this table.
		i. The daily average pressure drop shall not fall below the operating limit established in the performance test.	See item 3.c.i. of this table.
		ii. The daily average liquid-to-gas ratio shall not fall below the operating limit established during the performance test. See item 3.c.ii. of this table.	See item 4.c.iii. of this table.
		iii. The monthly rolling average equilibrium catalyst Ni	

		concentration shall not exceed the level established during the performance test.	

1 If applicable, you can use the alternative in § 63.1573 for gas flow rate instead of a continuous parameter monitoring system if you used the alternative method in the initial performance test. If so, you shall continuously monitor and record the air flow rate to the regenerator and the temperature of the gases entering the control device as described in § 63.1573. You shall determine and record the hourly average gas flow rate using Equation 1 of § 63.1573 and the daily average gas flow rate. You shall maintain the daily average gas flow rate below the operating limit established during the performance test.

TABLE 8 TO Subpart UUU OF PART 63.—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(a)(1), you shall meet each emission limitation in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	You shall meet the following emission limit for each catalyst regenerator vent * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 parts per million volume (ppmv) (dry basis).
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis). b. If you use a flare to meet the CO limit, the flare shall meet the requirements for control devices in § 63.11(b): visible emissions shall not exceed a total of 5 minutes during any 2 consecutive hours.

TABLE 9 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC
CRACKING UNITS

[As stated in § 63.1565(a)(2), you shall meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You shall meet this operating limit * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	Continuous emission monitoring system.	Not applicable	Not applicable.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	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 shall be present at all times and the flare shall be operating at all times that emissions may be vented to it.

TABLE 10 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1565(b)(1), you shall meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	And you use this type of control device for your vent * * *	You shall install, operate, and maintain this type of continuous monitoring system * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	Not applicable	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. Thermal incinerator	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature and oxygen content (percent, dry basis) in the incinerator vent stream.
	b. Process heater or boiler with a design heat input capacity under 44 MW or process heater or boiler in which all vent streams are not introduced into the flame zone.	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature.
	c. Flare	Monitoring device such as a
	d. No control device	

		thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a 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 SOURCE PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)

[As stated in § 63.1565(b)(2) and (3), you shall meet each requirement in the following table that applies to you]

For * * *	You shall * * *	Using * * *	According to these requirements* *
1. Each new or existing catalytic cracking unit catalyst regenerator vent.	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A in Appendix A to part 60 of this chapter.	Sampling sites shall be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2D, 2F, or 2G in Appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	
2. For each new or existing catalytic	d. Measure moisture content of the stack	Method 4 in Appendix A to	

cracking unit catalyst regenerator vent if you use a continuous emission monitoring system.	gas. Measure CO emissions	part 60 of this chapter. Data from your continuous emission monitoring system.	Collect CO monitoring data for each vent for 24 consecutive operating hours; and reduce the continuous emission monitoring data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.
3. Each catalytic cracking unit catalyst regenerator vent if you use continuous parameter monitoring systems.	a. Measure the CO concentration (dry basis) of emissions exiting the control device.	Method 10, 10A, or 10B in appendix A to part 60 of this chapter, as applicable.	
	b. Establish each operating limit in Table 9 of this subpart that applies to you.	Data from the continuous parameter monitoring systems.	
	c. Thermal incinerator combustion zone temperature.	Data from the continuous parameter monitoring systems.	Collect temperature monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average combustion zone temperature from all the readings.
	d. Thermal incinerator: oxygen, content (percent, dry basis) in the incinerator vent stream.	Data from the continuous parameter monitoring systems.	Collect oxygen concentration (percent, dry basis) monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average percent excess oxygen concentration from all the readings.
(Continued on next page)	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	Data from the continuous parameter monitoring systems.	

	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.		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 SOURCE PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)

[As stated in § 63.1565(b)(2) and (3), you shall meet each requirement in the following table that applies to you]

For * * *	You shall * * *	Using * * *	According to these requirements * * *
	f. If you use a flare, conduct visible emission observations. 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 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 shall meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis).	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured CO emissions are less than or equal to 500 ppm (dry basis). As part of the Notification of Compliance Status, you shall certify that your vent meets the CO limit. You are not required to conduct another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you shall certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to conduct another performance evaluation to demonstrate initial compliance.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis).	i. If you use a continuous parameter monitoring system, the average CO emissions measured by Method 10 over the period of the initial performance test are less than or
	b. If you use a flare, visible	

	emissions shall not exceed a total of 5 minutes during any 2 operating hours.	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 shall meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * ;*	Subject to this emission limit for your catalyst regenerator vent * * *	If you shall * * *	You shall demonstrate continuous compliance by * * *

1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis).	Continuous emission monitoring system.	Collecting the hourly average CO monitoring data according to § 63.1572; and maintaining the hourly average CO concentration at or below 500 ppmv (dry basis).
2. Not subject to the NSPS for CO in 40 CFR 60.103.	i. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis).	Continuous emission monitoring system.	Same as above.
	ii. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis).	Continuous parameter monitoring system.	Maintaining the hourly average CO concentration below 500 ppmv (dry basis).
	iii. Visible emissions from a flare shall not exceed a total of 5 minutes during any 2-hour period.	Control device-flare	Maintaining visible emissions below a total of 5 minutes during any 2-hour operating period.

TABLE 14 TO Subpart UUU OF PART 63—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP
EMISSIONS FROM CATALYTIC CRACKING UNITS
[As stated in § 63.1565(c)(1), you shall meet each requirement in the following table that applies to you]

For each new existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You shall demonstrate continuous compliance by * * *
1. Subject to NSPS for carbon monoxide (CO) in 40 CFR 60.103.	Continuous emission monitoring system.	Not applicable	Complying with Table 13 of this subpart.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. Continuous emission monitoring system.	Not applicable	Complying with Table 13 of this subpart.
	b. Continuous parameter monitoring systems—thermal incinerator.	i. The daily average combustion zone temperature shall not fall below the level established during the performance test.	Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test.
		ii. The daily average oxygen concentration in the vent stream (percent, dry basis) shall not fall below the level established during the performance test.	Collecting the hourly and daily average oxygen concentration monitoring data according to § 63.1572; and maintaining the daily average oxygen concentration above the limit established during the performance test.
	c. Continuous parameter monitoring systems—boiler or process heater with a design heat input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone.	The daily combustion zone temperature shall not fall below the level established in the performance test.	Collecting the average hourly and daily temperature monitoring data according to § 63.1572;

	d. Continuous parameter monitoring system—flare.	The flare pilot light shall be present at all times and the flare shall be operating at all times that emissions may be vented to it.	and maintaining the daily average combustion zone temperature above the limit established during the performance test. 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 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.

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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	Continuous parameter monitoring systems to measure and record the combustion zone

	vent streams are not introduced into the flame zone.	temperature.

TABLE 18 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(2) and (3), you must meet each requirement in the following table that applies to you

For each new or exiting catalytic reforming unit * * *	You must * * *	Using * * *	According to these requirements * * *
1. Option 1: vent to a flare.	a. Conduct visible emission observations.	Method 22 (40 CFR Part 60, Appendix A).	2-hour observation period. Record the presence of a flame at the pilot light over the full period of the test.
	b. Determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity.	Not applicable	40 CFR 60.11(b)(6) through (8).
2. Option 2: percent reduction or concentration limit.	a. Select sampling site	Method 1 or 1A (40 CFR part 60, Appendix A). No traverse site selection method is needed for vents smaller than 0.10 meter in diameter.	Sampling sites must be located at the inlet (if you elect the emission reduction standard) and outlet of the control device and prior to any releases to the atmosphere.
	b. Measure gas volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR Part 60, Appendix A), as applicable.	
	c. Measure TOC concentration (for percent reduction standard).	Method 25 (40 CFR Part 60, Appendix A) to measure TOC concentration at the inlet and outlet of the control device. If the TOC outlet concentration is expected to be less than	Take either an integrated sample or four grab samples during each run. If you use a grab sampling technique, take the

	d. Calculate TOC emission rate and mass emission reduction. e. Measure TOC concentration (for concentration standard). f. Determine oxygen content in the gas stream at the outlet of the control device. g. Correct the measured TOC concentration for oxygen content. 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.	50 ppm, you can use Method 25A to measure TOC concentration at the inlet and the outlet of the control device. 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. Method 25A (40 CFR Part 60, appendix A) to measure TOC concentration at the outlet of the control device. Method 3A or 3B (40 CFR part 60, Appendix A), as applicable. Equation 4 of § 63.1566 Data from the continuous parameter monitoring systems.	samples at approximately equal intervals in time, such as 15-minute intervals during the run. 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. b. Reduce uncontrolled emissions of TOC from your process vent using a control device, by 98 percent by weight or to a concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent.	Visible emissions, measured using Method 22 over the 2-hour observation period of the performance test do not exceed a total of 5 minutes. 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	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.

	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. 2. Option 2: Each new or existing catalytic reforming unit.	Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b). 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 visible emissions from a flare below a total of 5 minutes during any consecutive hours. 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	a. Flare that meets the requirements	The flare pilot light must present at all times and	Collecting flare monitoring data

reforming unit.	in § 63.11(b).	flare must be operating times that emissions may vented to it.	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 catalyst 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
2. Internal scrubbing system (i.e., no add-on control device).	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. 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
	b. Establish operating limit for pH		

	level.		liquid to the scrubber during each test run.
		Data from the continuous parameter monitoring systems.	(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. Determine and record the hourly average pH level from the recorded values.
	c. Establish operating limit for liquid- to-gas ratio.		(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.
2. Internal scrubbing system (i.e., no add-on control device).		Method 26 (40 CFR Part 60, Appendix A).	
	a. Measure the concentration of HCl in the catalyst regenerator exhaust gas.		
	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	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

		record the average HCl concentration.	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. 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.

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),	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. 3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit.	corrected to 3 percent oxygen. 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. 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. 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

	b. The daily average liquid-to-gas ratio must not fall below the level established during the performance test. c. The HCl concentration in the catalyst regenerator exhaust gas must not exceed the applicable operating limit established during the performance test.	Wet scrubber ..... Internal scrubbing system (e.g., no add-on control device).	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. 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 liquid to-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 29 TO Subpart UUU OF PART 63.—HAP EMISSION LIMITS FOR SRUs
[As stated in § 63.1568(a)(1), you must meet each emission limitation in the following table that applies to you]

For * * *	You must meet this emission limit for each process vent * * *
1. Each new or existing Claus SRU part of a sulfur recovery plant of 20 long tons per day or more and subject to the	a. 250 ppmv (dry basis) of SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.

NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	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.
2. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	a. 250 ppmv (dry basis) of SO2 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 SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.
3. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a)(2) of 40 CFR 60.104: Option 2 (TRS limit).	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO2 concentration (dry basis) at zero percent oxygen.

TABLE 30 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR HAP EMISSIONS FROM SRUs
[As stated in § 63.1568(a)(2), you must meet each operating limit in the following table that applies to you]

For * * *	If use this type of control device	You must meet this operating limit* * *

1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	Not applicable	Not applicable.
2. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	Not applicable ..... Thermal incinerator	Not applicable. 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.
3. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 2 (TRS limit).		

TABLE 31 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this limit * * *	You must install and operate this continuous monitoring system * * *
1. Each new or existing Claus sulfur recovery unit part to a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104 (1) (2).	a. 250 ppmv (dry basis) of SO2 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 SO2 (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 SO2 (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 (O2) emissions. Calculate the reduced sulfur emissions as SO2 (dry basis) at zero percent excess air. *Exception:* You can use an instrument having an air or SO2 dilution and oxidation system to convert the reduced sulfur to SO2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO2 instead of the reduced sulfur monitor. The monitor must include an oxygen
2. Option 1: Elect NSPS. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a) (2) of 40 CFR 60.104.	a. 250 ppmv (dry basis) of SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	

3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or Other type, regardless or size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104 (a) (2).	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.	monitor for correcting the data for excess oxygen. Continuous emission monitoring system to measure and record the hourly average concentration of SO2 (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.
	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO2 concentration (dry basis) at zero percent oxygen.	Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and O2 emissions for each exhaust stack. Calculate the reduced sulfur emissions as SO2 (dry basis), at zero percent excess air. *Exception:* You can use an instrument having an air or O2 dilution and oxidation system to convert the reduced sulfur to SO2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO2 instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess 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 SOURCE 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 SO2 concentration (for an oxidation or reduction system followed by incineration) or the concentration of reduced sulfur (or SO2 if you use an instrument to convert the reduced sulfur to SO2) for a reduction control system without incineration.	Data from continuous emission monitoring system.	Collect SO2 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. Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this	Sampling sites must be located at the outlet of the control device and prior to any releases

	b. Determine velocity and volumetric flow rate. c. Conduct gas molecular weight analysis; obtain the oxygen concentration needed to correct the emission rate for excess air. d. Measure moisture content of the stack gas. e. Measure the concentration of TRS. f. Calculate the SO2 equivalent for each run after correcting for moisture and oxygen. g. Correct the reduced sulfur	chapter, as applicable. Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable. Method 4 in appendix A to part 60 of this chapter. Method 15 or 15A in appendix A to part 60 of this chapter, as applicable. The arithmetic average of the SO2 equivalent for each sample during the run. Equation 1 of § 63.1568. Data from the continuous	to the atmosphere. Take the samples simultaneously with reduced sulfur or moisture samples. Make your sampling time for each Method 4 sample equal to that for 4 Method 15 samples. If the cross-sectional area of the duct is less than 5 square meters (m2) or 54 square feet, you must use the centroid of the cross section as the sampling point. If the cross-sectional area is 5 m2 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

(Continued on next page)

	samples to zero percent excess air.sa h. Establish each operating limit in Table 30 of this subpart that applies to you.	parameter monitoring system.	per minute to ensure minimum residence time for the sample inside the sample lines.

(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 SOURCE 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 SRUs
[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Each new or existing Clause sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by the continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation
	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.	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. You have already conducted a performance

2. Option 1: Elect NSPS. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) of SO2 at zero percent excess air if you use an oxidation control system followed by incineration.	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.
(Continued on next page)	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 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 ppmv (dry basis) at zero percent

		excess air; and your performance evaluation shows the monitoring system meets the applicable requirements in § 63.1572. 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.

(Cont.) TABLE 33 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
3. Option 2: TRS limit. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	300 ppmv of TRS compounds expressed as an equivalent SO2 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 SO2 concentration (dry basis) at zero percent oxygen; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572.

TABLE 34 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you.]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance by * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 day concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv (dry basis) SO2 at zero percent excess air if you use a	Collecting the hourly average

	reduction control system without incineration.	reduced sulfur and O2 data according to § 63.1572; and maintaining the hourly average concentration of reduced sulfur at or below the applicable limit; and determining and recording each 12-hour average concentration of reduced sulfur; and reporting any 12-hour average concentration of reduced sulfur greater than the applicable emission limitation in the compliance report required in § 63.1575.
2. Option 1: Elect NSPS Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) of SO2 at zero percent excess air (for oxidation or reduction system followed by incineration).	Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air (for reduction control system without incineration).	
3. Option 2: TRS limit Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	300 ppmv of TRS compounds, expressed as an SO2 concentration (dry basis) at zero percent oxygen or reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air.	Collecting the hourly average 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. Collecting the hourly average TRS monitoring data according to § 63.1572, if you use a continuous emission monitoring system; maintaining the hourly average concentration of TRS at or below the applicable limit; reducing the TRS monitoring data to 12-hour averages; reporting any 12-hour average TRS greater than the applicable limit in the compliance report required by § 63.1575; and maintaining the hourly average concentration of TRS below the applicable limit if you use continuous parameter monitoring systems.

TABLE 35 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR HAP EMISSIONS FROM SRUs

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant	Not applicable	Meeting the requirements of Table 34 of this subpart.

of 20 long tons per day or more and subject to the NSPS for sulfur oxides in paragraph 40 CFR 60.104(a)(2).	Not applicable	Meeting the requirements of Table 34 of this subpart.
2. Option 1: Elect NSPS Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	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.
3. Option 2: TRS limit Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2)	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 O2 monitoring data according to § 63.1572; and maintaining the average O2 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 shall meet each work practice standard in the following table that applies to you]

Option	You shall meet one of these equipment standards * * *

1. Option 1	Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.
2. Option 2	Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.
3. Option 3	Seal the bypass line by installing a solid blind between piping flanges.
4. Option 4	Vent the bypass line to a control device that meets the appropriate requirements in this subpart.

TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you shall meet each requirement in the following table that applies to you]

For this standard . . .	You shall . . .
1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor.	Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test.

TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you shall meet each requirement in the following table that applies to you]

For * * *	For this work practice standard * * *	You have demonstrated initial compliance if * * *
1. Each new or existing bypass line associated with a catalytic cracking unit, catalytic	a. Option 1: Install and operate a device (including a flow indicator, level recorder, or	The installed equipment operates properly during each run of the

reforming unit, or sulfur recovery unit.	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.	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. See item 1.b. of this table. See item 1.b. of this table.
	c. Option 3: Seal the bypass line by installing a solid blind between piping flanges.	
	d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart.	

TABLE 39 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you shall meet each requirement in the following table that applies to you]

If you elect this standard * * *	You shall demonstrate continuous compliance by * * *

1. Option 1: Flow indicator, level recorder, or electronic valve position monitor.	Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line.
2. Option 2: Car-seal or lock-and-key device	Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line.
3. Option 3: Solid blind flange	Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line.
4. Option 4: Vent to control device	Monitoring the control device according to appropriate subpart requirements.
5. Option 1, 2, 3, or 4	Recording and reporting the time and duration of any bypass.

TABLE 40 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you shall meet each requirement in the following table that applies to you]

This type of continuous opacity or emission monitoring system * * *	Shall meet these requirements * * *
1. Continuous opacity monitoring system	Performance specification 1 (40 CFR Part 60, Appendix B).
2. CO continuous emission monitoring system	Performance specification 4 (40 CFR Part 60, Appendix B); span value

	of 1,000 ppm; and procedure 1 (40 CFR Part 60, Appendix F) except
3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis).	relative accuracy test audits are required annually instead of quarterly.
4. SO_2 continuous emission monitoring for sulfur recovery unit with oxidation control system or reduction control system; this monitor shall include an O2 monitor for correcting the data for excess air.	Performance specification 4 (40 CFR Part 60, Appendix B); and span value of 100 ppm. Performance specification 2 (40 CFR Part 60, Appendix B); span values of 500 ppm SO_2 and 10 percent O2; use Methods 6 or 6C and 3A or 3B (40 CFR Part 60, Appendix A) for
5. Reduced sulfur and O2 continuous emission monitoring system for sulfur recovery unit with reduction control system not followed by incineration; this monitor shall include an O2 monitor for correcting the data for excess air unless exempted.	certifying O2 monitor; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly. 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 O2; use Methods 15 or 15A and 3A or 3B (40 CFR Part 60, Appendix A) for
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 O2 monitor.	certifying O2 monitor; if Method 3A or 3B yields O2 concentrations below 0.25 percent during the performance evaluation, the O2 concentration can be assumed to be zero and the O2 monitor is not required; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly.
7. TRS continuous emission monitoring system for sulfur recovery unit; this monitor shall include an O2 monitor for correcting the data for excess air.	Performance specification 5 (40 CFR Part 60, Appendix B); span value of 375 ppm SO_2 and 10 percent O2; use Methods 15 or 15A and 3A or 3B for certifying O2 monitor; and procedure 1 (40 CFR part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly.
8. O2 monitor for oxygen concentration	Performance specification 5 (40 CFR Part 60,

	Appendix B). 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 O2 sensor is 10 percent; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly.

TABLE 41 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF
CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued
[As stated in § 63.1572(c)(1), you shall meet each requirement in the following table that applies to you]

If you use a continuous parameter monitoring system to measure and record * * *	You shall * * *
1. Voltage and secondary current or total power input.	At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection.
2. Pressure drop 1	Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection.
3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate.	Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous
4. Combustion zone temperature	

	parameter monitoring system for gas flow rate as close as practical to the control device. 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;
5. pH	use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it shall have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a
6. HCl concentration	temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor shall yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion. Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you shall use pH strips with an accuracy of ±10 percent. Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable),

	and a standard deviation for measured values of no more than ±15 percent. System shall include a gas detection pump and hot air probe if needed for the measurement range.

TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you shall meet each requirement in the following table that applies to you]

For * * *	You shall provide this additional information * * *
1. Identification of affected sources and emission points.	Nature, size, design, method of operation, operating design capacity of each affected source; identify each emission point for each HAP; identify any affected source or vent associated with an affected source not subject to the requirements of Subpart UUU.
2. Initial compliance	Identification of each emission limitation you will meet for each affected source, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected source; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and
3. Continuous compliance	what equipment you installed; identification of the operating limit for each affected source, including supporting documentation; if your affected source is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test. Each monitoring option you elect; and identification of any unit or vent for which monitoring is

	not required; and the definition of ‘‘operating day.’’ (This definition, subject to approval by the applicable permitting authority, shall specify the times at which a 24-hr operating day begins and ends.)

TABLE 43 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR REPORTS
[As stated in § 63.1575(a), you shall meet each requirement in the following table that applies to you]

You shall submit a(n) * * *	The report shall contain * * *	You shall submit the report * * *
1. Compliance report	If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report shall contain the information in § 63.1575(d) or (e)	Semiannually according to the requirements in § 63.1575(b).

Table 44 to Subpart UUU of Part 63 - Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you shall meet each requirement in the following table that applies to you.

Citation	Subject	Applies to Subpart UUU	Explanation
§63.1	Applicability	Yes	Except that Subpart UUU specifies calendar or operating day.
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	

§63.5(a)-(c)	Construction and Reconstruction	Yes	In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5).
§63.5(d)(1)(i)	Application for Approval of Construction or Reconstruction - General Application Requirements	Yes	Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation.
§63.5(d)(1)(ii)		Yes	Except that emission estimates specified in §63.5(d)(1) (ii)(H) are not required.
§63.5(d)(1)(iii)		No	Subpart UUU specifies submission of notification of compliance status.
§63.5(d)(2)		No	
§63.5(d)(3)		Yes	Except that §63.5(d)(3)(ii) does not apply.
§63.5(d)(4)		Yes	
§63.5(e)	Approval of Construction or Reconstruction	Yes	
§63.5(f)(1)	Approval of Construction or Reconstruction Based on State Review	Yes	
§63.5(f)(2)		Yes	Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply.

§63.6(a)	Compliance with Standards and Maintenance - Applicability	Yes	
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Yes	
§63.6(b)(5)		Yes	Except that Subpart UUU specifies different compliance dates for sources.
§63.6(b)(6)	[Reserved]	Not applicable	
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Yes	
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Yes	Except that Subpart UUU specifies different compliance dates for sources subject to Tier II gasoline sulfur control requirements.
§63.6(c)(3)-(4)	[Reserved]	Not applicable	
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Yes	
§63.6(d)	[Reserved]	Not applicable	
§63.6(e)(1)-(2)	Operation and Maintenance Requirements	Yes	
§63.6(e)(3)(i)-(iii)	Startup, Shutdown, and Malfunction Plan	Yes	

§63.6(e)(3)(iv)		Yes	Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather shall be included in next periodic report.
§63.6(e)(3)(v)-(viii)		Yes	The owner or operator is only required to keep the latest version of the plan.
§63.6(f)(1)-(2)(iii)(C)	Compliance with Emission Standards	Yes	
§63.6(f)(2)(iii)(D)		No	
§63.6(f)(2)(iv)-(v)		Yes	
§63.6(f)(3)		Yes	
§63.6(g)	Alternative Standard	Yes	
§63.6(h)	Opacity/VE Standards	Yes	
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	No	Subpart UUU specifies methods.
§63.6(h)(2)(ii)	[Reserved]	Not applicable	
§63.6(h)(2)(iii)		Yes	
§63.6(h)(3)	[Reserved]	Not applicable	
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Yes	Applies to Method 22 tests.
§63.6(h)(5)	Conducting Opacity/VE Observations	No	
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Yes	Applies to Method 22 observations.

§63.6(h)(7)(i)	Report COM Monitoring Data from Performance Test	Yes	
§63.6(h)(7)(ii)	Using COM Instead of Method 9	No	
§63.6(h)(7)(iii)	Averaging Time for COM during Performance Test	Yes	
§63.6(h)(7)(iv)	COM Requirements	Yes	
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Yes	
§63.6(h)(9)	Adjusted Opacity Standard	Yes	
§63.6(i)(1)-(14)	Extension of Compliance	Yes	Not applicable to an affected source with Tier II compliance date. May be applicable to an affected source exempt from Tier II rule.
§63.6(i)(15)	[Reserved]	Not applicable	
§63.6(i)(16)		Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7(a)(1)	Performance Test Requirements-Applicability	Yes	Except that Subpart UUU specifies the applicable test and demonstration procedures.
§63.7(a)(2)	Performance Test Dates	No	Test results shall be submitted in the Notification of Compliance Status report due 150 days after the compliance date.
§63.7(a)(3)	Section 114 Authority	Yes	

§63.7(b)	Notifications	Yes	Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days.
§63.7(c)	Quality Assurance Program/Site-Specific Test Plan	Yes	
§63.7(d)	Performance Test Facilities	Yes	
§63.7(e)	Conduct of Tests	Yes	
§63.7(f)	Alternative Test Method	Yes	
§63.7(g)	Data Analysis, Record Keeping, Reporting	Yes	Except performance test reports shall be submitted with notification of compliance status due 150 days after the compliance date.
§63.7(h)	Waiver of Tests	Yes	
§63.8(a)(1)	Monitoring Requirements - Applicability	Yes	
§63.8(a)(2)	Performance Specifications	Yes	
§63.8(a)(3)	[Reserved]	Not applicable	
§63.8(a)(4)	Monitoring with Flares	Yes	
§63.8(b)(1)	Conduct of Monitoring	Yes	
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Yes	Subpart UUU specifies the required monitoring locations.

§63.8(c)(1)	Monitoring System Operation and Maintenance	Yes	
§63.8(c)(1)(i)-(ii)	Startup, Shutdown, and Malfunctions	Yes	Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions shall be described in next compliance report.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes	
§63.8(c)(2)-(3)	Monitoring System Installation	Yes	Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart UUU specifies operational requirements.

§63.8(c)(4)(i)-(ii)	Continuous Monitoring System Requirements	Yes	Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits.
§63.8(c)(5)	COM Minimum Procedures	Yes	
§63.8(c)(6)	CMS Requirements	No	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits.
§63.8(c)(7)-(8)	CMS Requirements	Yes	
§63.8(d)	Quality Control Program	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits.

§63.8(e)	CMS Performance Evaluation	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Yes	Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit.
§63.8(g)(1)-(4)	Reduction of Monitoring Data	Yes	Applies to a continuous opacity monitoring system or continuous emission monitoring system.
§63.8(g)(5)	Data Reduction	No	Subpart UUU specifies requirements.
§63.9(a)	Notification Requirements - Applicability	Yes	Duplicate Notification of Compliance Status report to the Regional Administrator may be required.

§63.9(b)(1)-(5)	Initial Notifications	Yes	Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date.
§63.9(c)	Request for Extension of Compliance	Yes	
§63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
§63.9(e)	Notification of Performance Test	Yes	Except that notification is required at least 30 days before test.
§63.9(f)	Notification of VE/Opacity Test	Yes	
§63.9(g)	Additional Notification Requirements for Sources with Continuous Monitoring Systems	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits.
§63.9(h)	Notification of Compliance Status	Yes	Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date.
§63.9(i)	Adjustment of Deadlines	Yes	

§63.9(j)	Change in Previous Information	Yes	
§63.10(a)	Record Keeping and Reporting-Applicability	Yes	
§63.10(b)	Records	Yes	Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or $_{SO2}$ reduced sulfur limit and the performance evaluation requires a relative accuracy test audit.
§63.10(c)(1)-(6), (9)-(15)	Additional Records for Continuous Monitoring Systems	Yes	Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or $_{SO2}$ limits.
§63.10(c)(7)-(8)	Records of Excess Emissions and Exceedances	No	Subpart UUU specifies requirements.
§63.10(d)(1)	General Reporting Requirements	Yes	
§63.10(d)(2)	Performance Test Results	No	Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.10(d)(3)	Opacity or VE Observations	Yes	

§63.10(d)(4)	Progress Reports	Yes	
§63.10(d)(5)(i)	Startup, Shutdown, and Malfunction Reports	Yes	Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority.
§63.10(d)(5)(ii)		Yes	Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but shall be included in the next periodic report.
§63.10(e)(1)-(2)	Additional CMS Reports	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. Reports of performance evaluations shall be submitted in Notification of Compliance Status.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Subpart UUU specifies the applicable requirements.
§63.10(e)(4)	COMS Data Reports	Yes	
§63.10(f)	Record Keeping/ Reporting Waiver	Yes	
§63.11	Control Device Requirements	Yes	Applicable to flares.

§63.13	Addresses	Yes	
§63.14	Incorporation by Reference	Yes	
§63.15	Availability of Information	Yes	

99. through 120. Part II, sections A.99 through A.120 originally contained the terms and conditions for 40 CFR Part 63, Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). It has since been determined that Subpart EEEE does not currently apply to any emissions units at this facility. In order to maintain the integrity of the references throughout the Title V permit, these sections of Part II shall be considered on reserve and shall remain void of any terms and conditions that require a compliance certification by the permittee.

Subpart DDDDD--National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

[The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart DDDDD: B001, B003, B004, B005, B006, B008, B009, B010, B014, B015, B016, B017, B018, B019, B020, B022, B029, B030, B031, and B032.]

What this Subpart Covers

121. **40 CFR 63.7480 What is the purpose of this subpart?**

This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

122. **40 CFR 63.7485 Am I subject to this subpart?**

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP as defined in §63.2 or §63.760 (40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in §63.7491.

123. **40 CFR 63.7490 What is the affected source of this subpart?**

(a) This subpart applies to new, reconstructed, or existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory located at a major source as defined in §63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater located at a major source as defined in §63.7575.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after January 13, 2003, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

124. **40 CFR 63.7491 Are any boilers or process heaters not subject to this subpart?**

The types of boilers and process heaters listed in paragraphs (a) through (o) of this section are not subject to this subpart.

(a) A municipal waste combustor covered by 40 CFR part 60, subpart AAAA, subpart BBBB or subpart Cb.

(b) A hospital/medical/infectious waste incinerator covered by 40 CFR part 60, subpart Ce or subpart Ec.

(c) An electric utility steam generating unit that is a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity, and supplies more than one-third of its potential electric output capacity, and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

(d) A boiler or process heater required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by 40 CFR part 63, subpart EEE (e.g., hazardous waste boilers).

(e) A commercial and industrial solid waste incineration unit covered by 40 CFR part 60, subpart CCCC or subpart DDDD.

(f) A recovery boiler or furnace covered by 40 CFR part 63, subpart MM.

(g) A boiler or process heater that is used specifically for research and development. This does not include units that only provide heat or steam to a process at a research and development facility.

(h) A hot water heater as defined in this subpart.

(i) A refining kettle covered by 40 CFR part 63, subpart X.

(j) An ethylene cracking furnace covered by 40 CFR part 63, subpart YY.

(k) Blast furnace stoves as described in the EPA document, entitled "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants - Background Information for Proposed Standards," (EPA-453/R-01-005).

(l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63.

(m) Any boiler and process heater specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act (CAA).

(n) Temporary boilers as defined in this subpart.

(o) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

125. **40 CFR 63.7495 When do I have to comply with this subpart?**

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than [INSERT THE DATE 3 YEARS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing facility must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing facility must be in compliance with this subpart within 3 years after the facility becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

Emission Limits and Work Practice Standards

126. 40 CFR 63.7499 What are the subcategories of boilers and process heaters?

(a) The subcategories of boilers and process heaters are large solid fuel, limited use solid fuel, small solid fuel, large liquid fuel, limited use liquid fuel, small liquid fuel, large gaseous fuel, limited use gaseous fuel, and small gaseous fuel. Each subcategory is defined in §63.7575.

(b) If you change an existing boiler or process heater in the large solid fuel subcategory such that its applicable subcategory also changes, and the change does not meet the definition of reconstruction as defined in subpart A of this part, you may choose to meet the applicable emission limits for the original large solid fuel subcategory.

127. 40 CFR 63.7500 What emission limits, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under §63.7507.

(2) You must meet each operating limit in Tables 2 through 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Tables 2 through 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under §63.8(f).

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

General Compliance Requirements

128. 40 CFR 63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits (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 can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to §63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.

(d) If you demonstrate compliance with any applicable emission limit through performance testing, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each continuous monitoring system (CMS) required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS 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);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(e) If you have an applicable emission limit or work practice standard, you must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

129. 40 CFR 63.7506 Do any boilers or process heaters have limited requirements?

(a) New or reconstructed boilers and process heaters in one of the liquid fuel subcategories (the large liquid fuel subcategory, the limited use liquid fuel subcategory, or the small liquid fuel subcategory) that burn only fossil fuels and other gases and do not burn any residual oil are subject to the emission limits and applicable work practice standards in Table 1 to this subpart. You are not required to conduct a performance test to demonstrate compliance with the emission limits. You are not required to set and maintain operating limits to demonstrate continuous compliance with the emission limits. However, you must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) To demonstrate initial compliance, you must include a signed statement in the Notification of Compliance Status report required in §63.7545(e) that indicates you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels.

(2) To demonstrate continuous compliance with the applicable emission limits, you must also keep records that demonstrate that you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. You must also include a signed statement in each semiannual compliance

report required in §63.7550 that indicates you burned only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, during the reporting period.

(b) The affected boilers and process heaters listed in paragraphs (b)(1) through (3) of this section are subject to only the initial notification requirements in §63.9(b) (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart or any other requirements in subpart A of this part).

(1) Existing large and limited use gaseous fuel units.

(2) Existing large and limited use liquid fuel units.

(3) New small liquid fuel units that burn only gaseous fuels or distillate oil. New small liquid fuel boilers and process heaters that commence burning of any other type of liquid fuel must comply with all applicable requirements of this subpart and subpart A of this part upon startup of burning the other type of liquid fuel.

(c) The affected boilers and process heaters listed in paragraphs (c)(1) through (4) of this section are not subject to the initial notification requirements in §63.9(b) and are not subject to any requirements in this subpart or in subpart A of this part (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSM plans, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart, or any other requirements in subpart A of this part.

(1) Existing small solid fuel boilers and process heaters.

(2) Existing small liquid fuel boilers and process heaters.

(3) Existing small gaseous fuel boilers and process heaters.

(4) New small gaseous fuel units.

130. 40 CFR 63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

(a) As an alternative to the requirement for large solid fuel boilers located at a single facility to demonstrate compliance with the HCl emission limit in Table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in appendix A to this subpart.

(b) In lieu of complying with the TSM emission standards in Table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for complying with the TSM emission standards in Table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions) under the procedures prescribed in appendix A of this subpart.

Testing, Fuel Analyses, and Initial Compliance Requirements

131. 40 CFR 63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For affected sources that elect to demonstrate compliance with any of the emission limits of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to §63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, establishing operating limits according to §63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to §63.7525.

(b) For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart.

(c) For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 to this subpart. If your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, your initial compliance demonstration is conducting a performance evaluation of your continuous emission monitoring system for carbon monoxide according to §63.7525(a).

(d) For existing affected sources, you must demonstrate initial compliance no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart.

(e) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003 and [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must demonstrate initial compliance with either the proposed emission limits and work practice standards or the promulgated emission limits and work practice standards no later than 180 days after [INSERT THE DATE 180 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or within 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(f) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003, and [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], and you chose to comply with the proposed emission limits and work practice standards when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limits and work practice standards within 3 years after [INSERT THE DATE 3 YEARS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or within 3 years after startup of the affected source, whichever is later.

(g) If your new or reconstructed affected source commences construction or reconstruction after [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

132. **40 CFR 63.7515 When must I conduct subsequent performance tests or fuel analyses?**

(a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (d) of this section.

(b) You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months after the previous performance test.

(c) If your boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, you may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

(d) If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

(e) If you have an applicable work practice standard for carbon monoxide and your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, you must conduct annual performance tests for carbon monoxide according to §63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.

(f) You must conduct a fuel analysis according to §63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540.

(g) You must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to §63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in §63.7550.

133. 40 CFR 63.7520 What performance tests and procedures must I use?

(a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in §63.7(c) if you elect to demonstrate compliance through performance testing.

(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.

(c) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to §63.7506(a).

(d) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and you must demonstrate initial compliance and establish your operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

(e) You may not conduct performance tests during periods of startup, shutdown, or malfunction.

(f) 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.

(g) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A to part 60 of this chapter to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

134. 40 CFR 63.7521 What fuel analyses and procedures must I use?

(a) You must conduct fuel analyses according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable.

(b) You must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 180 days before the date that you intend to demonstrate compliance.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that will be used.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. Collect all the material (fines and coarse) in the full cross-section. Transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.

(2) If sampling from a fuel pile or truck, collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) Transfer all samples to a clean plastic bag for further processing.

(d) Prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) Throughly mix and pour the entire composite sample over a clean plastic sheet.

(2) Break sample pieces larger than 3 inches into smaller sizes.

(3) Make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) Separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) Grind the sample in a mill.

(7) Use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart.

135. **40 CFR 63.7522 Can I use emission averaging to comply with this subpart?**

(a) As an alternative to meeting the requirements of §63.7500, if you have more than one existing large solid fuel boiler located at your facility, you may demonstrate compliance by emission averaging according to the procedures in this section in a State that does not choose to exclude emission averaging.

(b) For each existing large solid fuel boiler in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(c) You may average particulate matter or TSM, HCl, and mercury emissions from existing large solid fuel boilers to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in paragraphs (d), (e), and (f) of this section.

(d) The weighted average emissions from the existing large solid fuel boilers participating in the emissions averaging option must be in compliance with the limits in Table 1 to this subpart at all times following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraphs (e)(1) or (2).

(1) You must use equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

$$AveWeightedEmissions = \sum_{i=1}^{n} (Er \times Hm) \div \sum_{i=1}^{n} Hm$$

(Eq. 1)

where:

AveWeighted Emissions	=	Average weighted emissions for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input;
Er	=	Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input;
Hm	=	Maximum rated heat input capacity of boiler, i, in units of million Btu per hour;
n	=	Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use equation 2 of this section as an alternative to using equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

$$AveWeightedEmissions = \sum_{i=1}^{n} (Er \times Sm \times Cf) \div \sum_{i=1}^{n} Sm \times Cf$$

(Eq.2)

where:

AveWeighted Emissions	=	Average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Er	=	Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Sm	=	Maximum steam generation by boiler, i, in units of pounds.
Cf	=	Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(f) You must demonstrate continuous compliance on a 12-month rolling average basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) and (2). The first 12-month rolling-average period begins on the compliance date specified in §63.7495.

(1) For each calendar month, you must use equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual heat capacity for each existing large solid fuel boiler participating in the emissions averaging option.

$$AveWeightedEmissions = \sum_{i=1}^{n} (Er \times Hb) \div \sum_{i=1}^{n} Hb$$

(Eq. 3)

where:

AveWeighted Emissions	=	12-month rolling average weighted emission level for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Er	=	Emission rate, calculated during the most recent compliance test,(as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Hb	=	The average heat input for each calendar month of boiler, i, in units of million Btu
n	=	Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use equation 4 of this section as an alternative to using equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual steam generation from the large solid fuel boilers participating in the emissions averaging option.

$$AveWeightedEmissions = \sum_{i=1}^{n} (Er \times Sa \times Cf) \div \sum_{i=1}^{n} Sa \times Cf$$

(Eq. 4)

where:

AveWeighted Emissions	=	12-month rolling average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Er	=	Emission rate, calculated during the most recent compliance test(as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Sa	=	Actual steam generation for each calender month by boiler, i, in units of pounds.
Cf	=	Conversion factor, as calculated during the most recent compliance test,in units of million Btu of heat input per pounds of steam generated.

(g) You must develop and submit an implementation plan for emission averaging to the applicable regulatory authority for review and approval according to the following procedures and requirements in paragraphs (f)(1) through (4).

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing large solid fuel boilers in the averaging group, including for each either the applicable HAP emission level or the control technology installed on;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group of large solid fuel boilers;

(iii) The specific control technology or pollution prevention measure to be used for each emission source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(iv) The test plan for the measurement of particulate matter (or TSM), HCl, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable regulatory authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating conditions.

(3) Upon receipt, the regulatory authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (f)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing large solid fuel boiler.

136. 40 CFR 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495.

(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(b) If you have an applicable opacity operating limit, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (b)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and according to PS 1 of 40 CFR part 60, appendix B.

(3) As specified in §63.8(c)(4)(i), each COMS 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.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.

(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.

(c) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (c)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (c)(3) of this section.

(5) Record the results of each inspection, calibration, and validation check.

(d) If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (c) and (d)(1) through (4) of this section.

(1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow sensor calibration check at least semiannually.

(e) If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (c) and (e)(1) through (6) of this section.

(1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(f) If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (c) and (f)(1) through (3) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(g) If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.

(h) If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (c) and (h)(1) through (3) of this section.

(1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

(i) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (i)(1) through (8) of this section.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

137. **40 CFR 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?**

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to §63.7520, paragraph (c) of this section, and Tables 5, 7 and 8 to this subpart OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to §63.7521, paragraph (d) of this section, and Tables 6 and 8 to this subpart.

(b) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to §63.7506(a).

(c) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Tables 2 through 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (c)(4) of this section, as applicable. You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (3) of this section, as applicable.

(1) You must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in paragraphs (c)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the performance testing for HCl, you must determine the fraction of the total heat input for each fuel type burned (Q_i) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned ©$_i$).

(iii) You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

Where:

Cl_{input}	=	Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.
C_i	=	Arithmetic average concentration of chlorine in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu
Q_i	=	Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i
n	=	Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (Qi) based on the fuel mixture that has the highest content of total selected metals, and the average TSM concentration of each fuel type burned (Mi).

(iii) You must establish a baseline TSM input level using Equation 6 of this section.

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \quad \text{(Eq. 6)}$$

Where:

TSM_{input}	=	Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu;
M_i	=	Arithmetic average concentration of TSM in fuel type, i, analyzed according to §63.7521, in units of pound per million Btu;
Q_i	=	Fraction of total heat input from based fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i;
n	=	Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(3) You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in paragraphs (c)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Q_i) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HG_i).

(iii) You must establish a maximum mercury input level using Equation 7 of this section.

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

Where:

$Mercury_{input}$	=	Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu;
HG_i	=	Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pound per million Btu;
Q_i	=	Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i;
n	=	Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(4) You must establish parameter operating limits according to paragraphs (c)(4)(i) through (iv) of this section.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in §63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, HCl, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating

limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator, you must establish the minimum voltage and secondary current (or total power input), as defined in §63.7575, as your operating limits during the three-run performance test.

(iii) For a dry scrubber, you must establish the minimum sorbent injection rate, as defined in §63.7575, as your operating limit during the three-run performance test.

(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(d) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (d)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.

$$P_{90} = \text{mean} + (SD * t) \qquad \text{(Eq. 8)}$$

Where:

P_{90}	=	90th percentile confidence level pollutant concentration, in pounds per million Btu;
mean	=	Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu;
SD	=	Standard deviation of the pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu;
t	=	t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.

$$HCl = \sum_{i=1}^{n} \left[(C_{i90})(Q_i)(1.028) \right] \qquad \text{(Eq. 9)}$$

Where:

HCl	=	HCl emission rate from the boiler or process heater in units of pounds per million Btu;
C_{i90}	=	90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 8 of this section;
Q_i	=	Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i;

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine;
1.028= Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate that you calculate for your boiler or process heater using Equation 10 of this section must be less than the applicable emission limit for TSM.

$$TSM = \sum_{i=1}^{n} \left[(M_{i90})(Q_i) \right] \quad \text{(Eq. 10)}$$

Where:

TSM = TSM emission rate from the boiler or process heater in units of pounds per million Btu;
M_{i90} = 90th percentile confidence level concentration of TSM in fuel, i, in units of pound per million Btu as calculated according to Equation 8 of this section;
Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of total selected metals. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i;
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(5) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must be less than the applicable emission limit for mercury.

$$\text{Mercury} = \sum_{i=1}^{n} \left[(HG_{i90})(Q_i) \right] \quad \text{(Eq. 11)}$$

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu;
HG_{i90} = 90th percentile confidence level concentration of mercury in fuel, i, in units of pound per million Btu as calculated according to Equation 8 of this section;
Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i;
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(e) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

Continuous Compliance Requirements

138. 40 CFR 63.7535 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).

(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, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

139. **40 CFR 63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?**

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.

(1) Following the date on which the initial performance test is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.

(2) You must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of TSM, HCl, and mercury, than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of TSM, chlorine, and mercury than the maximum values calculated during the last performance tests (if you demonstrate compliance through performance testing).

(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the HCl emission rate using Equation 5 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 5 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel type or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 1 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 1 of §63.7530 are higher than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the

emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 6 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 6 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 2 of §63.7530. If the results of recalculating the maximum total selected metals input using Equation 2 of §63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 7 of §63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 7 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 3 of §63.7530. If the results of recalculating the maximum mercury input using Equation 3 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions according to your SSMP, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a

minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to §63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.

(i) You must continuously monitor carbon monoxide according to §§63.7525(a) and 63.7535.

(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.

(iii) Keep records of carbon monoxide levels according to §63.7555(b).

(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP as required in §63.7505(e).

(d) 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 EPA Administrator's satisfaction that you were operating in accordance with your SSMP. The EPA 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).

140. 40 CFR 63.7541 How do I demonstrate continuous compliance under the emission averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (4) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing large solid fuel boilers participating in the emissions averaging option as determined in §63.7522(f) and (g);

(2) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit;

(3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and

(4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (4) of this section, except during periods of startup, shutdown, and malfunction, is a deviation.

Notification, Reports, and Records

141. 40 CFR 63.7545 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 days after [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. The Initial Notification must include the information required in paragraphs (b)(1) and (2) of this section, as applicable.

(1) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by §63.9(b)(2).

(2) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories (the limited use solid fuel subcategory, the limited use liquid fuel subcategory, or the limited use gaseous fuel subcategory), your Initial Notification must include the information required by §63.9(b)(2) and also a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.

(c) As specified in §63.9(b)(3), if you startup your new or reconstructed affected source on or after [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 days after you become subject to this subpart. The Initial Notification must include the information required in paragraphs (c)(1) and (2) of this section, as applicable.

(1) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by §63.9(b).

(2) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, your Initial Notification must include the information required by §63.9(b) and a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530(a), you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(l) through (9), as applicable.

(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.

(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

142. **40 CFR 63.7550 What reports must I submit and when?**

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(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 §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in §63.7495.

(2) The first 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 first calendar half after the compliance date that is specified for your source in §63.7495.

(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 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), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) 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) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 1 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 5 of §63.7530 that demonstrates that your source is still meeting the emission

limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 2 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 6 of §63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 3 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 7 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 1 of §63.7530, the maximum TSM input operating limit using Equation 2 of §63.7530, or the maximum mercury input operating limit using Equation 3 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) 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).

(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.

(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (e)(1) through (12) of this section. This includes

periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (i.e., what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(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.

(5) 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.

(6) 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.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f) 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 9 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 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice 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 the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48
hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

143. **40 CFR 63.7555 What records must I keep?**

(a) You must keep records according to paragraphs (a)(1) through (3) 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 or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(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) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

(d) For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (d)(1) through (5) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.

(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 1 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 5 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(4) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 2 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 6 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 3 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit

for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 7 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(e) If your boiler or process heater is subject to an emission limit or work practice standard in Table 1 to this subpart and has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, you must keep the records in paragraphs (e)(1) and (2) of this section.

(1) A copy of the federally enforceable permit that limits the annual capacity factor of the source to less than or equal to 10 percent.

(2) Fuel use records for the days the boiler or process heater was operating.

144. 40 CFR 63.7560 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, 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.

Other Requirements and Information

145. 40 CFR 63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

146. 40 CFR 63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by U.S. 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 (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office 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 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, the U.S. EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.7500(a) through (c) under §63.6(g).

(2) Approval of alternative opacity emission limits in §63.7500(a) under §63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major change to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major change to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

147. **40 CFR 63.7575 What definitions apply to this subpart?**

Terms used in this subpart are defined in the CAA, in §63.2 (the General Provisions), and in this section as follows:

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year, and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biomass fuel means unadulterated wood as defined in this subpart, wood residue, and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal litter; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total heat input (based on an annual average) from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388-99e1, "Standard Specification for Classification of Coals by Rank," coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures, for the purposes of this subpart. Coal derived gases are excluded from this definition.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

Construction/demolition material means waste building material that result from the construction or demolition operations on houses and commercial and industrial buildings.

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 emission limit, 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 emission limit, 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.

A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-02a, "Standard Specifications for Fuel Oils."

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition.

Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

Electrostatic precipitator means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Firetube boiler means a boiler in which hot gases of combustion pass through the tubes and water contacts the outside surfaces of the tubes.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, subbituminous coal, lignite, anthracite, biomass, construction/demolition material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material.

Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210°F (99°C).

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply

emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

Large liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent. Large gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Large solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Limited use gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any liquid or solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Limited use liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent. Limited use gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Limited use solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Minimum pressure drop means 90 percent of the lowest test-run average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means 90 percent of the lowest test-run average effluent pH measured at the outlet of the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber flow rate means 90 percent of the lowest test-run average flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent flow rate means 90 percent of the lowest test-run average sorbent (or activated carbon) flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835-03a, "Standard Specification for Liquid Petroleum Gases."

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396-02a, "Standard Specifications for Fuel Oils."

Responsible official means responsible official as defined in 40 CFR 70.2.

Small gaseous fuel subcategory includes any firetube boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and any boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Small liquid fuel subcategory includes any firetube boiler that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and any boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input. Small gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Small solid fuel subcategory includes any firetube boiler that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, and any other boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

Total selected metals means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Unadulterated wood means wood or wood products that have not been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote. Plywood, particle board, oriented strand board, and other types of wood products bound by glues and resins are included in this definition.

Watertube boiler means a boiler in which water passes through the tubes and hot gases of combustion pass over the outside surfaces of the tubes.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of

the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter and/or to absorb and neutralize acid gases, such as hydrogen chloride.

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.

148. **Tables to Subpart DDDDD of Part 63**

Table 1 to Subpart DDDDD of Part 63 — Emission Limits and Work Practice Standards

As stated in §63.7500, you must comply with the following applicable emission limits:

If your boiler or process heater is in this subcategory...	For the following pollutants...	You must meet the following emission limits and work practice standards...
1. New or reconstructed large solid fuel	a. Particulate Matter (OR Total Selected Metals)	0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu/hr of heat input)
	b. Hydrogen Chloride	0.02 lb per MMBtu of heat input
	c. Mercury	0.000003 lb per MMBtu of heat input
	d. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 7 percent oxygen (30-day rolling average for units 100 MMBtu/hr or greater, 3-run average for units less than 100 MMBtu/hr)
2. New or reconstructed limited use solid fuel	a. Particulate Matter (OR Total Selected Metals)	0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu/hr of heat input)
	b. Hydrogen Chloride	0.02 lb per MMBtu of heat input
	c. Mercury	0.000003 lb per MMBtu of heat input
	d. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 7 percent oxygen (3-run average)

3.	New or reconstructed small solid fuel	a. Particulate Matter (OR Total Selected Metals)	0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu/hr of heat input)
		b. Hydrogen Chloride	0.02 lb per MMBtu of heat input
		c. Mercury	0.000003 lb per MMBtu of heat input
4.	New or reconstructed large liquid fuel	a. Particulate Matter	0.03 lb per MMBtu of heat input
		b. Hydrogen Chloride	0.0005 lb per MMBtu of heat input
		c. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen (30-day rolling average for units 100 MMBtu/hr or greater, 3-run average for units less than 100 MMBtu/hr)
5.	New or reconstructed limited use liquid fuel	a. Particulate Matter	0.03 lb per MMBtu of heat input
		b. Hydrogen Chloride	0.0009 lb per MMBtu of heat input
		c. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average)
6.	New or reconstructed small liquid fuel	a. Particulate Matter	0.03 lb per MMBtu of heat input
		b. Hydrogen Chloride	0.0009 lb per MMBtu of heat input
7.	New or reconstructed large gaseous fuel	Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen (30-day rolling average for units 100 MMBtu/hr or greater, 3-run average for units less than 100 MMBtu/hr)
8.	New or reconstructed limited use gaseous fuel	Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average)
9.	Existing large solid fuel	a. Particulate Matter (OR Total Selected Metals)	0.07 lb per MMBtu of heat input (0.001 lb per MMBtu/hr of heat input)
		b. Hydrogen Chloride	0.09 lb per MMBtu of heat input
		c. Mercury	0.000009 lb per MMBtu of heat input

10. Existing limited use solid fuel	Particulate Matter (OR Total Selected Metals)	0.21 lb per MMBtu of heat input (0.004 lb per MMBtu/hr of heat input)

Table 2 to Subpart DDDDD of Part 63 — Operating Limits for Boilers and Process Heaters with Particulate Matter Emission Limits

As stated in §63.7500, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable particulate matter emission limits using...	**You must meet these operating limits...**
1. Wet scrubber control	a. Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.
2. Fabric filter control	a. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period; OR b. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
3. Electrostatic precipitator control	a. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).; OR

	b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.
4. Any other control type	This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).

Table 3 to Subpart DDDDD of Part 63 — Operating Limits for Boilers and Process Heaters With Mercury Emission Limits and Boilers and Process Heaters That Choose to Comply With the Alternative Total Selected Metals Emission Limits

As stated in §63.7500, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable mercury and/or total selected metals emission limits using...	**You must meet these operating limits...**
1. Wet scrubber control	Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.

2. Fabric filter control	a. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period; OR b. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
3. Electrostatic precipitator control	a. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average); OR b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.
4. Dry scrubber or carbon injection control	Maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for mercury.

5. Any other control type	This option is only for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
6. Fuel analysis	Maintain the fuel type or fuel mixture such that the mercury and/or total selected metals emission rates calculated according to §63.7530(d)(4) and/or (5) is less than the applicable emission limits for mercury and/or total selected metals.

Table 4 to Subpart DDDDD of Part 63 — Operating Limits for Boilers and Process Heaters with Hydrogen Chloride Emission Limits

As stated in §63.7500, you must comply with the following applicable operating limits:

If you demonstrate compliance with applicable hydrogen chloride emission limits using...	**You must meet these operating limits...**
1. Wet scrubber control	Maintain the minimum scrubber effluent pH, pressure drop, and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.
2. Dry scrubber control	Maintain the minimum sorbent injection rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.
3. Fuel analysis	Maintain the fuel type or fuel mixture such that the hydrogen chloride emission rate calculated according to §63.7530(d)(3) is less than the applicable emission limit for hydrogen chloride.

Table 5 to Subpart DDDDD of Part 63 — Performance Testing Requirements

As stated in §63.7520, you must comply with the following requirements for performance test for existing, new or reconstructed affected sources:

To conduct a performance test for the following pollutant...	You must...	Using...
1. Particulate Matter	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter or ASME PTC 19, Part 10(1981).
	d. Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the particulate matter emission concentration	Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
2. Total selected metals	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter or ASME PTC 19, Part 10(1981).
	d. Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.

	e.	Measure the total selected metals emission concentration	Method 29 in appendix A to part 60 of this chapter.
	f.	Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
3. Hydrogen chloride	a.	Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b.	Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c.	Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter or ASME PTC 19, Part 10(1981).
	d.	Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
	e.	Measure the hydrogen chloride emission concentration	Method 26 or 26A in appendix A to part 60 of this chapter.
	f.	Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.

4.	Mercury	a.	Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
		b.	Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
		c.	Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter or ASME PTC 19, Part 10(1981).
		d.	Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
		e.	Measure the mercury emission concentration	Method 29 in appendix A to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784-02.
		f.	Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.

5. Carbon Monoxide	a. Select the sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter or ASME PTC 19, Part 10(1981).
	d. Measure the moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the carbon monoxide emission concentration.	Method 10, 10A, or 10 B in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.

Table 6 to Subpart DDDDD of Part 63 — Fuel Analysis Requirements

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources:

To conduct a fuel analysis for the following pollutant...	You must...	Using...
1. Mercury	a. Collect fuel samples.	Procedure in §63.7521(c) or ASTM D2234M-03 (for coal) or ASTM D6323-98 (2003) (for biomass) or equivalent.
	b. Composite fuel samples.	Procedure in §63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal) or ASTM D5198-92 (2003) (for biomass) or equivalent.

			ASTM D5865-03a (for coal) or ASTM E711-87 (1996) (for biomass) or equivalent.
	d.	Determine heat content of the fuel type.	ASTM D3173-02 or ASTM E871-82 (1998) or equivalent.
	e.	Determine moisture content of the fuel type.	ASTM D3684-01 (for coal) or SW-846-7471A (for solid samples) or SW-846 7470A (for liquid samples).
	f.	Measure mercury concentration in fuel sample.	
	g.	Convert concentrations in into units of pounds of pollutant per MMBtu of heat content.	
2. Total selected metals	a.	Collect fuel samples.	Procedure in §63.7521(c) or ASTM D2234M-03 (for coal) or ASTM D6323-98 (2003) (for biomass) or equivalent.
	b.	Composite fuel samples.	Procedure in §63.7521(d) or equivalent.
	c.	Prepare composited fuel samples	SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal) or ASTM D5198-92 (2003)(for biomass) or equivalent.
	d.	Determine heat content of the fuel type.	ASTM D5865-03a (for coal) or ASTM E 711-87 (for biomass) or equivalent. ASTM D3173-02 or ASTM E871 or equivalent. SW-846-6010Bor ASTM D3683-94 (2000) (for coal) or ASTM E885-88

	e. Determine moisture content of the fuel type. f. Measure total selected metals concentration in fuel sample. g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.	(1996) (for biomass).
3.Hydrogen chloride	a. Collect fuel samples. b. Composite fuel samples. c. Prepare composited fuel samples d. Determine heat content of the fuel type. e. Determine moisture content of the fuel type. f. Measure chlorine concentration in fuel sample. g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.	Procedure in §63.7521(c) or ASTM D2234M-03 (for coal) or ASTM D6323-98 (2003) (for biomass) or equivalent. Procedure in §63.7521(d) or equivalent. SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal) or ASTM D5198-92 (2003) (for biomass) or equivalent. ASTM D5865-03a (for coal) or ASTME 711-87 (1996) (for biomass) or equivalent. ASTM D3173-02 or ASTM E871-82 (1998) or equivalent. SW-846-9250 or ASTM E776-87 (1996) (for biomass) or equivalent.

Table 7 to Subpart DDDDD of Part 63 — Establishing Operating Limits

As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

If you have an applicable emission limit for...	And your operating limits are based on...	You must...	Using...	According to the following requirements
1. Particulate matter, mercury, or total selected metals.	a. Wet scrubber operating parameters	i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to §63.7530(c)	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals performance test.	(a) You must collect pressure drop and liquid flow-rate data every 15 minutes during the entire period of the performance tests; (b) Determine the average pressure drop and liquid flow-rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
	b. Electrostatic precipitator operating parameters (option only for units with additional wet scrubber control)	i. Establish a site-specific minimum voltage and secondary current or total power input according to §63.7530(c)	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals performance test.	(a) You must collect voltage and secondary current or total power input data every 15 minutes during the entire period of the performance tests; (b) Determine the average voltage and secondary current or total power input for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
	c. A site-specific opacity limit (only for units that meet the criteria for having a site-specific opacity	i. Establish a site-specific maxim	(1) Data from the continuous opacity monitoring system and the particulate matter, mercury, or total selected	(a) Collecting the opacity monitoring system data according to §63.7525(b) and §63.7535; and (b) Reducing the opacity

		limit according to §63.7530(c)(6)(i)		um opacity operating limit according to §63.7530(c)	metals performance test.	monitoring data to 6-minute averages; and (c) Determine the average opacity for each individual test run in the three-run performance test by computing the average of all the 6-minute readings taken during each test run.
2.	Hydrogen Chloride	a.	Wet scrubber operating parameters	i.	Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to §63.7530(c)	(1) Data from the pH, pressure drop, and liquid flow rate monitors and the hydrogen chloride performance test.	(a) You must collect pH, pressure drop, and liquid flow-rate data every 15 minutes during the entire period of the performance tests; (b) Determine the average pH, pressure drop, and liquid flow-rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
		b.	Dry scrubber operating parameters	i.	Establish a site-specific minimum sorbent injection rate operating limit	(1) Data from the sorbent injection rate monitors and the hydrogen chloride performance test.	(a) You must collect sorbent injection rate data every 15 minutes during the entire period of the performance tests; (b) Determine the average sorbent injection rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.

		according to §63.7530(c)		

Table 8 to Subpart DDDDD of Part 63 — Demonstrating Continuous Compliance

As stated in §63.7540, you must show continuous compliance with the emission limitations for affected sources according to the following:

If you must meet the following operating limits or work practice standards...	You must demonstrate continuous compliance by...
1. Opacity.	a. Collecting the opacity monitoring system data according to §§63.7525(b) and 63.7535; and b. Reducing the opacity monitoring data to 6-minute averages; and c. Maintaining opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent for existing sources; OR maintaining opacity to less than or equal to 10 percent (1-hour block average) for new sources.
2. Fabric Filter Bag Leak Detection Operation.	Installing and operating a bag leak detection system according to §63.7525 and operating the fabric filter such that the requirements in §63.7540(a)(9) are met.
3. Wet Scrubber Pressure Drop and Liquid Flow-rate.	a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to §63.7530 (c).
4. Wet Scrubber pH.	a. Collecting the pH monitoring system data according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average pH at or above the operating limit established during the performance test according to §63.7530(c).

5. Dry Scrubber Sorbent or Carbon Injection Rate.	a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average sorbent or carbon injection rate at or above the operating limit established during the performance test according to §63.7530(c).
6. Electrostatic Precipitator Secondary Current and Voltage or Total Power Input.	a. Collecting the secondary current and voltage or total power input monitoring system data for the electrostatic precipitator according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average secondary current and voltage or total power input at or above the operating limits established during the performance test according to §63.7530(c).
7. Fuel Pollutant Content.	a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to §63.7530(c) or (d) as applicable; and b. Keeping monthly records of fuel use according to §63.7540(a).

Table 9 to Subpart DDDDD of Part 63 — Reporting Requirements

As stated in §63.7550, you must comply with the following requirements for reports:

You must submit a(n)	The report must contain...	You must submit the report...
1. compliance report	a. information required in §63.7550(c)(1)through(11) AND b. if there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 8 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the	semiannually according to the requirements in §63.7550(b).

	reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during the which the CMSs were out-of-control during the reporting period AND c. if you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in §63.7550(d). If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control, as specified in §63.8(c)(7), the report must contain the information in §63.7550(e) AND 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)	

2. an immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan	a. actions taken for the event AND b. The information in §63.10(d)(5)(ii)	i. by fax or telephone within 2 working days after starting actions inconsistent with the plan; and ii. by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

Table 10 to Subpart DDDDD of Part 63 — Applicability of General Provisions to Subpart DDDDD

As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

Citation	Subject	Brief Description	Applicalbe
§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	GP apply unless compliance extension AND 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 AND 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 (e.g.,example, 3 years)	Yes.
§63.6(d)	[Reserved]		
§63.6(e)(1)-(2)	Operation & Maintenance	Operate to minimize emissions at all times AND Correct malfunctions as soon as practicable AND Operation and maintenance requirements independently enforceable information Administrator will use to determine if operation and maintenance	Yes.

		requirements were met	
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP)	Requirement for SSM and startup, shutdown, malfunction plan Content of SSMP	Yes.
§63.6(f)(1)	Compliance Except During SSM	Comply with emission 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)(1)	Compliance with Opacity/VE Standards	Comply with opacity/VE emission limitations at all times except during SSM	Yes.
§63.6(h)(2)(i)	Determining Compliance with Opacity/Visible Emission (VE) Standards	If standard does not state test method, use Method 9 for opacity and Method 22 for VE	No.
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	Yes.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and Schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with thirty, 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE observations	Keep records available and allow Administrator to inspect	No.

§63.6(h)(7)(i)	Report continuous opacity monitoring system Monitoring Data from Performance Test	Submit continuous opacity monitoring system data with other performance test data	Yes.
§63.6(h)(7)(ii)	Using continuous opacity monitoring system instead of Method 9	Can submit continuous opacity monitoring system data instead of Method 9 results even if subpart requires Method 9, but must notify Administrator before performance test	No.
§63.6(h)(7)(iii)	Averaging time for continuous opacity monitoring system during performance test	To determine compliance, must reduce continuous opacity monitoring system data to 6-minute averages	Yes.
§63.6(h)(7)(iv)	Continuous opacity monitoring system requirements	Demonstrate that continuous opacity monitoring system performance evaluations are conducted according to §§63.8(e), continuous opacity monitoring system are properly maintained and operated according to 63.8(c) and data quality as §63.8(d)	Yes.
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	Continuous opacity monitoring system is probative but not conclusive evidence of compliance with opacity standard, even if Method 9 observation shows otherwise. Requirements for continuous opacity monitoring system to be probative evidence–proper maintenance, meeting PS 1, and data have not been altered	Yes.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all continuous opacity monitoring system, Method 9, and Method 22 results, as well as information about operation and maintenance to determine compliance	Yes.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	Yes.
§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 rule	Yes.
§63.7(a)(1)	Performance Test Dates	Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations	Yes.
§63.7(a)(2)	Performance Test Dates	New source with initial startup date before effective date has 180 days after effective date to demonstrate compliance	Yes.
§63.7(a)(2)(ii-viii)	[Reserved]		
§63.7(a)(2)(ix)	Performance Test Dates	New source that commenced construction between proposal and promulgation dates, when promulgated standard is more stringent than proposed standard, has 180 days after effective date or 180 days after startup of source, whichever is later, to demonstrate compliance AND If source initially demonstrates compliance with less stringent proposed standard, it has 3 years and 180 days after the effective date of the standard or 180 days after startup of source, whichever is later, to demonstrate compliance with promulgated standard	Yes. No.
§63.7(a)(3)	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 AND Performance audit requirements AND 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	No.
		AND	
		Cannot conduct performance tests during SSM.	Yes.
		AND	
		Not a deviation to exceed standard during SSM	Yes.
		AND	
		Upon request of Administrator, make available records necessary to determine conditions of performance tests	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 separate test runs AND Compliance is based on arithmetic mean of three runs AND Conditions when data from an additional test run can be used	Yes.
§63.7(e)(4)	Interaction with other sections of the Act.	Nothing in §63.7(e)(1) through (4) can abrogate the Administrator's authority to require testing under Section 114 of the Act.	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 AND Must submit performance test data 60 days after end of test with the Notification of Compliance Status AND 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	No.

§63.8(b)(1)(i)-(ii)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(1)(iii)	Monitoring	Flares not subject to this section unless otherwise specified in relevant standard	No.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems AND Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise AND If more than one monitoring system on an emission 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	Maintain and operate CMS according to §63.6(e)(1)	Yes.
§63.8(c)(1)(ii)	SSM not in SSMP	Must keep necessary parts available for routine repairs of CMSs	Yes.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Must develop and implement an SSMP for CMSs	Yes.
§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emission and parameter measurements AND Must verify operational status before or at performance test	Yes.

§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	CMSs must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts	No.
§63.8(c)(4)(i)	Continuous Monitoring System (CMS) Requirements	Continuous opacity monitoring system 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	Yes.
§63.8(c)(4)(ii)	Continuous Monitoring System (CMS) Requirements	Continuous emissions monitoring system must have a minimum of one cycle of operation for each successive 15-minute period	No.
§63.8(c)(5)	Continuous Opacity Monitoring system (COMS) Requirements	Must do daily zero and high level calibrations	Yes.
§63.8(c)(6)	Continuous Monitoring System (CMS) Requirements	Must do daily zero and high level calibrations	No.
§63.8(c)(7)-(8)	Continuous monitoring systems Requirements	Out-of-control periods, including reporting	Yes.
§63.8(d)	Continuous monitoring systems Quality Control	Requirements for continuous monitoring systems quality control, including calibration, etc. AND Must keep quality control plan on record for the life of the affected source. Keep old versions for 5 years after revisions	Yes.
§63.8(e)	Continuous monitoring systems 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 continuous emissions monitoring system	No.

§63.8(g)(1)-(4)	Data Reduction	Continuous opacity monitoring system 6-minute averages calculated over at least 36 evenly spaced data points AND Continuous emissions monitoring system 1-hour averages computed over at least 4 equally spaced data points	Yes.
§63.8(g)(5)	Data Reduction	Data that cannot be used in computing averages for continuous emissions monitoring system and continuous opacity monitoring system	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 AND Notification of intent to construct/ reconstruct AND Notification of commencement of construct/reconstruct; Notification of startup AND 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 Continuous Monitoring Systems	Notification of performance evaluation AND Notification using continuous opacity monitoring system data AND Notification that exceeded criterion for relative accuracy	Yes.
§63.9(h)(1)-(6)	Notification of Compliance Status	Contents AND Due 60 days after end of performance test or other compliance demonstration, 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 AND When to submit to Federal vs. State authority AND Procedures for owners of more than 1 source	Yes.

§63.10(b)(1)	Recordkeeping/Reporting	General Requirements AND Keep all records readily available AND Keep for 5 years	Yes.
§63.10(b)(2)(i)-(v)	Records related to Startup, Shutdown, and Malfunction	Occurrence of each of operation (process equipment) AND Occurrence of each malfunction of air pollution equipment AND Maintenance on air pollution control equipment AND Actions during startup, shutdown, and malfunction	Yes.
§63.10(b)(2)(vi) and (x-xi)	Continuous monitoring systems Records	Malfunctions, inoperative, out-of-control AND Calibration checks AND Adjustments, maintenance	Yes.

§63.10(b)(2)(vii)-(ix)	Records	Measurements to demonstrate compliance with emission limitations AND Performance test, performance evaluation, and visible emission observation results AND 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)(1),(5)-(8),(10)-(15)	Records	Additional Records for continuous monitoring systems	Yes.
§63.10(c)(7)-(8)	Records	Records of excess emissions and parameter monitoring exceedances for continuous monitoring systems	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	Yes.
§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 continuous monitoring systems Reports	Must report results for each CEM on a unit AND Written copy of performance evaluation AND 3 copies of continuous opacity monitoring system performance evaluation	Yes.
§63.10(e)(3)	Reports	Excess Emission 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) AND Provision to request semiannual reporting after compliance for one year AND Submit report by 30th day following end of quarter or calendar half AND If there has not been an exceedance or excess emission (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), §63.8(c)(7-8)	No.

§63.10(e)(3)(vi-viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for continuous monitoring systems (now called deviations) Requires all of the information in §63.10(c)(5-13), §63.8(c)(7-8)	No.
§63.10(e)(4)	Reporting continuous opacity monitoring system data	Must submit continuous opacity monitoring system data with performance test data	Yes.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11	Flares	Requirements for flares	No.
§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.

149. **Appendix A to Subpart DDDDD – Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives Specified for the Large Solid Fuel Subcategory**

1. Purpose/Introduction

This appendix provides the methodology and criteria for demonstrating that your affected source is eligible for the compliance alternative for the HCl emission limit and/or the total selected metals (TSM) emission limit. This appendix specifies emissions testing methods that you must use to determine HCl, chlorine, and manganese emissions from the affected units and what parts of the affected source facility must be included in the eligibility demonstration. You must demonstrate that your affected source is eligible for the health-based compliance alternatives using either a look-up table analysis (based on the look-up tables included in this appendix) or a site-specific compliance demonstration performed according to the criteria specified in this appendix. This appendix also specifies how and when you file any eligibility demonstrations for your affected source and how to show that your affected source remains eligible for the health-based compliance alternatives in the future.

2. Who is eligible to demonstrate that they qualify for the health-based compliance alternatives?

Each new, reconstructed, or existing affected source may demonstrate that they are eligible for the health-based compliance alternatives. Section 63.7490 of subpart DDDDD defines the affected source and explains which affected sources are new, existing, or reconstructed.

3. What parts of my facility have to be included in the health-based eligibility demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD in the eligibility demonstration.

If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD in the eligibility demonstration.

4. How do I determine HAP emissions from my affected source?

(a) You must conduct HAP emissions tests for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods specified in Table 1 of this appendix.

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl_2.

If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

(b) Periods when emissions tests must be conducted.

(1) You must not conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(2) You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.

(c) Number of test runs. You must conduct three separate test runs for each test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(d) Sampling locations. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(e) Collection of monitoring data for HAP control devices. During the emissions test, you must collect operating parameter monitoring system data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements in Tables 3 or 4, as appropriate, of subpart DDDDD using data from the monitoring system and the procedures specified in §63.7530 of subpart DDDDD.

(f) Nondetect data. You may treat emissions of an individual HAP as zero if all of the test runs result in a nondetect measurement and the condition in paragraph (1) is met for the manganese test method. Otherwise nondetect data for individual HAP must be treated as one-half of the method detection limit.

(1) For manganese measured using Method 29 in appendix A to 40 CFR part 60, you analyze samples using atomic absorption spectroscopy (AAS).

(g) You must determine the maximum hourly emission rate for each appropriate emission point according to equation 1.

$$AveWeightedEmissions = \sum_{i=1}^{n} (Er \times Hm) \div \sum_{i=1}^{n} Hm \qquad \text{(Eq. 1)}$$

where:

MaxHourly Emissions	=	Maximum hourly emissions for hydrogen chloride, chlorine, or manganese, in units of pounds per hour.
Er	=	Emission rate (the 3-run average as determined according to Table 1 of this appendix) for hydrogen chloride, chlorine, or manganese, in units of pounds per million Btu of heat input.
Hm	=	Maximum rated heat input capacity of appropriate emission point, in units of million Btu per hour.

5. What are the criteria for determining if my facility is eligible for the health-based compliance alternatives?

(a) Determine the HAP emissions from each appropriate emission point within the affected source facility using the procedures specified in section 4 of this appendix.

(b) Demonstrate that your facility is eligible for either of the health-based compliance alternatives using either the methods described in section 6 of this appendix (look-up table analysis) or section 7 of this appendix (site-specific compliance demonstration).

(c) Your facility is eligible for the health-based compliance alternative for HCl if 1 of the following 2 statements is true:

(1) The calculated HCl-equivalent emission rate is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that your maximum HI for HC1 and $C1_2$ at a location where people live is less than or equal to 1.0;

(d) Your facility is eligible for the health-based compliance alternative for TSM if 1 of the following 2 statements is true:

(1) The manganese emission rate for all your subpart DDDDD sources is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that your maximum HQ for manganese at a location where people live is less than or equal to 1.0;

6. How do I conduct a look-up table analysis?

You may use look-up tables to demonstrate that your facility is eligible for either the compliance alternative for the HCl emission limit or the compliance alternative for TSM emission limit.

(a) HCl health-based compliance alternative. To calculate the total toxicity-weighted HCl-equivalent emission rate for your facility, first calculate the total affected source emission rate of HCl by summing the maximum hourly HCl emission rates from all your subpart DDDDD sources. Then, similarly, calculate the total affected source emission rate for Cl_2. Finally, calculate the toxicity-weighted emission rate (expressed in HCl equivalents) according to equation 2 of this appendix.

$$ER_{tw} = \sum(ER_i \times (RfC_{HCl}/RfC_i)) \qquad \text{Eq. 2}$$

where:

ER_{tw} is the HC1-equivalent emission rate, lb/hr
ER_i is the emission rate of HAP i in lbs/hr
RfC_i is the reference concentration of HAP i
RfC_{HCl} is the reference concentration of HCl (RfCs for HC1 and $C1_2$ can be found at http://www.epa.gov/ttn/atw/toxsource/summary.html)

The calculated HCl-equivalent emission rate will then be compared to the appropriate allowable emission rate in Table 2 of this appendix. To determine the correct value from the table, a subpart DDDDD average value should be used for stack height and the minimum distance between any subpart DDDDD stack at the facility and the property boundary should be used for property boundary distance. If one or both of these values do not match the exact values in the lookup tables then use the next lowest table value. (Note: If your average stack height is less than 5 meters, you must use the 5 meter row.) Your facility is eligible to comply with the health-based alternative HCl emission limit if your toxicity-weighted HCl equivalent emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value in Table 2 of this appendix.

(b) TSM Compliance Alternative. To calculate the total manganese emission rate for your affected source, sum the maximum hourly manganese emission rates for all your subpart DDDDD sources. The calculated manganese emission rate will then be compared to the allowable emission rate in the Table 3 of this appendix. To determine the correct value from the table, a subpart DDDDD average value should be used for stack height and the minimum distance between any subpart DDDDD stack at the facility and the property boundary should be used for property boundary distance. If one or both of these values do not match the exact values in the lookup tables then use the next lowest table value. (Note: If your average stack height is less than 5 meters, you must use the 5 meter row.) Your facility may exclude manganese when demonstrating compliance with the TSM emission limit if your manganese emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value specified in Table 3 of this appendix.

7. How do I conduct a site-specific compliance demonstration?

If you fail to demonstrate that your facility is able to comply with one or both of the alternative health-based emission standards using the lookup table approach, you may choose to perform a site-specific compliance demonstration for your facility. You may use any scientifically-accepted peer-reviewed risk assessment methodology for your site-specific compliance demonstration. An example of one approach for performing a site-specific compliance demonstration for air toxics can be found in the EPA's "Air Toxics Risk Assessment Reference Library, Volume 2, Site-Specific Risk Assessment Technical Resource Document", which may be obtained through the EPA's Air Toxics Website at www.epa.gov/ttn/atw.

(a) Your facility is eligible for the HCl alternative compliance option if your site-specific compliance demonstration shows that the maximum HI for HC1 and Cl_2 from your subpart DDDDD sources is less than 1.0.

(b) Your facility is eligible for the TSM alternative compliance option if your site-specific compliance demonstration shows that the maximum HQ for manganese from your subpart DDDDD sources is less than 1.0.

(c) at a minimum, your site-specific compliance demonstration must:

(1) estimate long-term inhalation exposures through the estimation of annual or multi-year average ambient concentrations;

(2) estimate the inhalation exposure for the individual most exposed to the facility's emissions;

(3) use site-specific, quality-assured data wherever possible;

(4) use health-protective default assumptions wherever site-specific data are not available, and;

(5) contain adequate documentation of the data and methods used for the assessment so that it is transparent and can be reproduced by an experienced risk assessor and emissions measurement expert.

(d) Your site-specific compliance demonstration need not:

(1) assume any attenuation of exposure concentrations due to the penetration of outdoor pollutants into indoor exposure areas;

(2) assume any reaction or deposition of the emitted pollutants during transport from the emission point to the point of exposure;

8. What must my health-based eligibility demonstration contain?

(a) Your health-based eligibility demonstration must contain, at a minimum, the information specified in paragraphs (a)(1) through (6) of this section.

(1) Identification of each appropriate emission point at the affected source facility, including the maximum rated capacity of each appropriate emission point.

(2) Stack parameters for each appropriate emission point including, but not limited to, the parameters listed in (a)(2)(i) through (iv) below:

(i) Emission release type

(ii) Stack height, stack area, stack gas temperature, and stack gas exit velocity

(iii) Plot plan showing all emission points, nearby residences, and fenceline.

(iv) Identification of any control devices used to reduce emissions from each appropriate emission point.

(3) Emission test reports for each pollutant and appropriate emission point which has been tested using the test methods specified in Table 1 of this appendix, including a description of the process parameters identified as being worst case. For those emissions which are not measured but are included in the assessment, the calculation method used, the inputs and outputs of any estimation developed, and any supporting references should be included in the documentation.

(4) Identification of the RfC values used in your look-up table analysis or site-specific compliance demonstration.

(5) Calculations used to determine the HCl-equivalent or manganese emission rates according to sections 6(a) or (b) of this appendix.

(6) Identification of the controlling process factors (including, but not limited to, fuel type, heat input rate, type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) that will become Federally enforceable permit conditions used to show that your facility remains eligible for the health-based compliance alternatives.

(b) If you use the look-up table analysis in section 6 of this appendix to demonstrate that your facility is eligible for either health-based compliance alternative, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (b)(1) through (3) of this section.

(1) Calculations used to determine the average stack height of the subpart DDDDD emission points.

(2) Identification of the subpart DDDDD emission point with the minimum distance to the property boundary of the facility.

(3) Comparison of the values in the look-up tables (Tables 2 and 3 of this appendix) to your maximum HCl-equivalent or manganese emission rates.

(c) If you use a site-specific compliance demonstration as described in section 7 of this appendix to demonstrate that your facility is eligible, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (c)(1) through (7) of this section:

(1) Identification of the risk assessment methodology used.

(2) Documentation of the fate and transport model used.

(3) Documentation of the fate and transport model inputs, including the information described in paragraphs (a)(1) through (5) of this section converted to the dimensions required for the model and all of the following that apply: meteorological data; building, land use, and terrain data; receptor locations and population data; and other facility-specific parameters input into the model.

(4) Documentation of the fate and transport model outputs.

(5) Documentation of any exposure assessment and risk characterization calculations.

(6) Comparison of the HQ HI to the limit of 1.0.

9. When do I have to complete and submit my health-based eligibility demonstration?

(a) If you have an existing affected source, you must complete and submit your eligibility demonstration to your permitting authority, along with a signed certification that the demonstration is an accurate depiction of your facility, no later than the date one year prior to the compliance date of subpart DDDDD. A separate copy of the eligibility demonstration must be submitted to: U.S. EPA, Risk and Exposure Assessment Group, Emission Standards Division (C404-01), Attn: Group Leader, Research Triangle Park, North Carolina 27711.

(b) If you have a new or reconstructed affected source that starts up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, then you must comply with the requirements of subpart DDDDD until your eligibility demonstration is completed and submitted to your permitting authority.

(c) If you have a new or reconstructed affected source that starts up after the effective date for subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after the effective date for subpart DDDDD, then you must follow the schedule in paragraphs (1) and (2) of this section.

(1) You must complete and submit a preliminary eligibility demonstration based on the information (e.g., equipment types, estimated emission rates, etc.) used to obtain your title V permit. You must base your preliminary eligibility demonstration on the maximum emissions allowed under your title V permit. If the preliminary eligibility demonstration indicates that your affected source facility is eligible for either compliance alternative, then you may start up your new affected source and your new affected source will be considered in compliance with the alternative HCl standard and subject to the compliance requirements in this appendix or, in the case of manganese, your compliance demonstration with the TSM emission limit is based on 7 metals (excluding manganese).

(2) You must conduct the emission tests specified in section 4 of this appendix upon initial startup and use the results of these emissions tests to complete and submit your eligibility demonstration within 180 days following your initial startup date. To be eligible, you must meet the criteria in section 11 of this appendix within 18 months following initial startup of your affected source.

10. When do I become eligible for the health-based compliance alternatives?

To be eligible for either health-based compliance alternative, the parameters that defined your affected source as eligible for the health-based compliance alternatives (including, but not limited to, fuel type, type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) must be incorporated as Federally enforceable limits into your title V permit. If you do not meet these criteria, then your affected source is subject to the applicable emission limits, operating limits, and work practice standards in Subpart DDDDD.

11. How do I ensure that my facility remains eligible for the health-based compliance alternatives?

(a) You must update your eligibility demonstration and resubmit it each time you have a process change, such that any of the parameters that defined your affected source changes in a way that could result in increased HAP emissions (including, but not limited to, fuel type, change in type of control device, changes in process parameters documented as worst-case conditions during the emissions testing used for your approved eligibility demonstration).

(b) If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section, then you must perform emission testing according to section 4 of this appendix for the subpart DDDDD emission points that may have increased HAP emissions beyond the levels reflected in your previously approved eligibility demonstration due to the process change. You must submit your revised eligibility demonstration to the permitting authority prior to revising your permit to incorporate the process change. If your updated eligibility demonstration indicates that your affected source is no longer eligible for the health-based compliance alternatives, then you must comply with the applicable emission limits, operating limits, and compliance requirements in Subpart DDDDD prior to making the process change and revising your permit.

13. What records must I keep?

You must keep records of the information used in developing the eligibility demonstration for your affected source, including all of the information specified in section 8 of this appendix.

14. Definitions.

The definitions in §63.7575 of subpart DDDDD apply to this appendix. Additional definitions applicable for this appendix are as follows:

Hazard Index (HI) means the sum of more than one hazard quotient for multiple substances and/or multiple exposure pathways.

Hazard Quotient (HQ) means the ratio of the predicted media concentration of a pollutant to the media concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the RfC.

Look-up table analysis means a risk screening analysis based on comparing the HAP or HAP-equivalent emission rate from the affected source to the appropriate maximum allowable HAP or HAP-equivalent emission rates specified in Tables 2 and 3 of this appendix.

Reference Concentration (RfC) means an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is

likely to be without an appreciable risk of deleterious effects during a lifetime. It can be derived from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.

Worst-case operating conditions means operation of an affected unit during emissions testing under the conditions that result in the highest HAP emissions or that result in the emissions stream composition (including HAP and non-HAP) that is most challenging for the control device if a control device is used. For example, worst case conditions could include operation of an affected unit firing solid fuel likely to produce the most HAP.

Table 1 to Appendix B of Subpart DDDDD. Emission Test Methods.

For...	You must...	Using...
(1) each subpart DDDDD emission point for which you choose to use a compliance alternative	select sampling ports' location and the number of traverse points	Method 1 of 40 CFR part 60, appendix A.
(2) each emission DDDDD emission point for which you choose to use a compliance alternative	determine velocity and volumetric flow rate;	Method 2, 2F, or 2G in appendix A to 40 CFR part 60.
(3) each emission DDDDD emission point for which you choose to use a compliance alternative	conduct gas molecular weight analysis	Method 3A or 3B in appendix A to 40 CFR part 60.
(4) each emission DDDDD emission point for which you choose to use a compliance alternative	measure moisture content of the stack gas	Method 4 in appendix A to 40 CFR part 60.
(5) each emission DDDDD emission point for which you choose to use the HCl compliance alternative	measure the hydrogen chloride and chlorine emission concentrations	Method 26 or 26A in appendix A to 40 CFR part 60.
(6) each emission DDDDD emission point for which you choose to use the TSM compliance alternative	measure the manganese emission concentration	Method 29 in appendix A to 40 CFR part 60.
(7) each emission DDDDD emission point for which you choose to use a compliance alternative	convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.

Table 2 to Appendix A of Subpart DDDDD. Allowable toxicity-weighted emission rate expressed in HCl equivalents (lbs/hr)

	distance to property boundary (m)											
Stack ht.(m)	**0**	**50**	**100**	**150**	**200**	**250**	**500**	**1000**	**1500**	**2000**	**3000**	**5000**
5	114.9	114.9	114.9	114.9	114.9	114.9	144.3	287.3	373.0	373.0	373.0	373.0
10	188.5	188.5	188.5	188.5	188.5	188.5	195.3	328.0	453.5	434.4	434.4	434.4
20	386.1	386.1	386.1	386.1	386.1	386.1	386.1	425.4	580.0	602.7	602.7	602.7
30	396.1	396.1	396.1	396.1	396.1	396.1	396.1	436.3	596.2	690.6	807.8	816.5
40	408.1	408.1	408.1	408.1	408.1	408.1	408.1	448.2	613.3	715.5	832.2	966.0
50	421.4	421.4	421.4	421.4	421.4	421.4	421.4	460.6	631.0	746.3	858.2	1002.8
60	435.5	435.5	435.5	435.5	435.5	435.5	435.5	473.4	649.0	778.6	885.0	1043.4
70	450.2	450.2	450.2	450.2	450.2	450.2	450.2	486.6	667.4	813.8	912.4	1087.4
80	465.5	465.5	465.5	465.5	465.5	465.5	465.5	500.0	685.9	849.8	940.9	1134.8
100	497.5	497.5	497.5	497.5	497.5	497.5	497.5	527.4	723.6	917.1	1001.2	1241.3
200	677.3	677.3	677.3	677.3	677.3	677.3	677.3	682.3	919.8	1167.1	1390.4	1924.6

Table 3 to Appendix A of Subpart DDDDD. Allowable Manganese Emission Rate (lbs/hr)

	distance to property boundary (m)											
Stack ht.(m)	**0**	**50**	**100**	**150**	**200**	**250**	**500**	**1000**	**1500**	**2000**	**3000**	**5000**
5	0.29	0.29	0.29	0.29	0.29	0.29	0.36	0.72	0.93	0.93	0.93	0.93
10	0.47	0.47	0.47	0.47	0.47	0.47	0.49	0.82	1.13	1.09	1.09	1.09
20	0.97	0.97	0.97	0.97	0.97	0.97	0.97	1.06	1.45	1.51	1.51	1.51
30	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.49	1.73	2.02	2.04
40	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.12	1.53	1.79	2.08	2.42
50	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.15	1.58	1.87	2.15	2.51
60	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.18	1.62	1.95	2.21	2.61
70	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.22	1.67	2.03	2.28	2.72
80	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.25	1.71	2.12	2.35	2.84
100	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.32	1.81	2.29	2.50	3.10
200	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.71	2.30	2.92	3.48	4.81

Subpart J—Standards of Performance for Petroleum Refineries

[The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart J: B029, B030, B031, B032, P009, and P037.]

[The following emissions units shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices as described in PTI 04-01290 (as issued on 7/25/2002): B001, B003, B004, B005, B006, B008, B010, B014, B015, B016, B017, B018, B019, B020, and B022.]

150. 40 CFR 60.100 Applicability, designation of affected facility, and reconstruction.

(a) The provisions of this subpart are applicable to the following affected facilities in petroleum refineries: fluid catalytic cracking unit catalyst regenerators, fuel gas combustion devices, and all Claus sulfur recovery plants except Claus plants of 20 long tons per day (LTD) or less. The Claus sulfur recovery plant need not be physically located within the boundaries of a petroleum refinery to be an affected facility, provided it processes gases produced within a petroleum refinery.

(b) Any fluid catalytic cracking unit catalyst regenerator or fuel gas combustion device under paragraph (a) of this section which commences construction or modification after June 11, 1973, or any Claus sulfur recovery plant under paragraph (a) of this section which commences construction or modification after October 4, 1976, is subject to the requirements of this subpart except as provided under paragraphs (c) and (d) of this section.

(c) Any fluid catalytic cracking unit catalyst regenerator under paragraph (b) of this section which commences construction or modification on or before January 17, 1984, is exempted from §60.104(b).

(d) Any fluid catalytic cracking unit in which a contact material reacts with petroleum derivatives to improve feedstock quality and in which the contact material is regenerated by burning off coke and/or other deposits and that commences construction or modification on or before January 17, 1984, is exempt from this subpart.

(e) For purposes of this subpart, under §60.15, the fixed capital cost of the new components" includes the fixed capital cost of all depreciable components which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following January 17, 1984. For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

151. 40 CFR 60.101 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A.

(a) *Petroleum refinery* means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking or reforming of unfinished petroleum derivatives.

(b) *Petroleum* means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

(c) *Process gas* means any gas generated by a petroleum refinery process unit, except fuel gas and process upset gas as defined in this section.

(d) *Fuel gas* means any gas which is generated at a petroleum refinery and which is combusted. Fuel gas also includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Fuel gas does not include gases generated by catalytic cracking unit catalyst regenerators and fluid coking burners.

(e) *Process upset gas* means any gas generated by a petroleum refinery process unit as a result of start-up, shut-down, upset or malfunction.

(f) *Refinery process unit* means any segment of the petroleum refinery in which a specific processing operation is conducted.

(g) *Fuel gas combustion device* means any equipment, such as process heaters, boilers and flares used to combust fuel gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid.

(h) *Coke burn-off* means the coke removed from the surface of the fluid catalytic cracking unit catalyst by combustion in the catalyst regenerator. The rate of coke burn-off is calculated by the formula specified in §60.106.

(i) *Claus sulfur recovery plant* means a process unit which recovers sulfur from hydrogen sulfide by a vapor-phase catalytic reaction of sulfur dioxide and hydrogen sulfide.

(j) *Oxidation control system* means an emission control system which reduces emissions from sulfur recovery plants by converting these emissions to sulfur dioxide.

(k) *Reduction control system* means an emission control system which reduces emissions from sulfur recovery plants by converting these emissions to hydrogen sulfide.

(l) *Reduced sulfur compounds* means hydrogen sulfide (H_2S), carbonyl sulfide (COS) and carbon disulfide (CS_2).

(m) *Fluid catalytic cracking unit* means a refinery process unit in which petroleum derivatives are continuously charged; hydrocarbon molecules in the presence of a catalyst suspended in a fluidized bed are fractured into smaller molecules, or react with a contact material suspended in a fluidized bed to improve feedstock quality for additional processing; and the catalyst or contact material is continuously regenerated by burning off coke and other deposits. The unit includes

the riser, reactor, regenerator, air blowers, spent catalyst or contact material stripper, catalyst or contact material recovery equipment, and regenerator equipment for controlling air pollutant emissions and for heat recovery.

(n) *Fluid catalytic cracking unit catalyst regenerator* means one or more regenerators (multiple regenerators) which comprise that portion of the fluid catalytic cracking unit in which coke burn-off and catalyst or contact material regeneration occurs, and includes the regenerator combustion air blower(s).

(o) *Fresh feed* means any petroleum derivative feedstock stream charged directly into the riser or reactor of a fluid catalytic cracking unit except for petroleum derivatives recycled within the fluid catalytic cracking unit, fractionator, or gas recovery unit.

(p) *Contact material* means any substance formulated to remove metals, sulfur, nitrogen, or any other contaminant from petroleum derivatives.

(q) *Valid day* means a 24-hour period in which at least 18 valid hours of data are obtained. A "valid hour" is one in which at least 2 valid data points are obtained.

152. 40 CFR 60.102 Standard for particulate matter.

Each owner or operator of any fluid catalytic cracking unit catalyst regenerator that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the fluid catalytic cracking unit catalyst regenerator will be operated, or 180 days after initial startup, whichever comes first.

(a) No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any fluid catalytic cracking unit catalyst regenerator:

(1) Particulate matter in excess of 1.0 kg/Mg (2.0 lb/ton) of coke burn-off in the catalyst regenerator.

(2) Gases exhibiting greater than 30 percent opacity, except for one six-minute average opacity reading in any one hour period.

(b) Where the gases discharged by the fluid catalytic cracking unit catalyst regenerator pass through an incinerator or waste heat boiler in which auxiliary or supplemental liquid or solid fossil fuel is burned, particulate matter in excess of that permitted by paragraph (a)(1) of this sectionmay be emitted to the atmosphere, except that the incremental rate of particulate matter emissions shall not exceed 43.0 g/MJ (0.10 lb/million Btu) of heat input attributable to such liquid or solid fossil fuel.

153. 40 CFR 60.103 Standard for carbon monoxide.

Each owner or operator of any fluid catalytic cracking unit catalyst regenerator that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and

after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the fluid catalytic cracking unit catalyst regenerator will be operated, or 180 days after initial startup, whichever comes first.

(a) No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any fluid catalytic cracking unit catalyst regenerator any gases that contain carbon monoxide (CO) in excess of 500 ppm by volume (dry basis).

154. 40 CFR 60.104 Standards for sulfur oxides.

Each owner or operator that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after initial startup, whichever comes first.

(a) No owner or operator subject to the provisions of this subpart shall:

(1) Burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph.

(2) Discharge or cause the discharge of any gases into the atmosphere from any Claus sulfur recovery plant containing in excess of:

(i) For an oxidation control system or a reduction control system followed by incineration, 250 ppm by volume (dry basis) of sulfur dioxide (SO_2) at zero percent excess air.

(ii) For a reduction control system not followed by incineration, 300 ppm by volume of reduced sulfur compounds and 10 ppm by volume of hydrogen sulfide (H_2S), each calculated as ppm SO_2 by volume (dry basis) at zero percent excess air.

(b) Each owner or operator that is subject to the provisions of this subpart shall comply with one of the following conditions for each affected fluid catalytic cracking unit catalyst regenerator:

(1) With an add-on control device, reduce sulfur dioxide emissions to the atmosphere by 90 percent or maintain sulfur dioxide emissions to the atmosphere less than or equal to 50 ppm by volume (vppm), whichever is less stringent; or

(2) Without the use of an add-on control device, maintain sulfur oxides emissions calculated as sulfur dioxide to the atmosphere less than or equal to 9.8 kg/Mg (20 lb/ton) coke burn-off; or

(3) Process in the fluid catalytic cracking unit fresh feed that has a total sulfur content no greater than 0.30 percent by weight.

(c) Compliance with paragraph (b)(1), (b)(2), or (b)(3) of this section is determined daily on a 7-day rolling average basis using the appropriate procedures outlined in §60.106.

(d) A minimum of 22 valid days of data shall be obtained every 30 rolling successive calendar days when complying with paragraph (b)(1) of this section.

155. 40 CFR 60.105 Monitoring of emissions and operations.

(a) Continuous monitoring systems shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this subpart as follows:

(1) For fluid catalytic cracking unit catalyst regenerators subject to §60.102(a)(2), an instrument for continuously monitoring and recording the opacity of emissions into the atmosphere. The instrument shall be spanned at 60, 70, or 80 percent opacity.

(2) For fluid catalytic cracking unit catalyst regenerators subject to §60.103(a), an instrument for continuously monitoring and recording the concentration by volume (dry basis) of CO emissions into the atmosphere, except as provided in paragraph (a)(2)(ii) of this section.

(i) The span value for this instrument is 1,000 ppm CO.

(ii) A CO continuous monitoring system need not be installed if the owner or operator demonstrates that the average CO emissions are less than 50 ppm (dry basis) and also files a written request for exemption to the Administrator and receives such an exemption. The demonstration shall consist of continuously monitoring CO emissions for 30 days using an instrument that shall meet the requirements of Performance Specification 4 of Appendix B of this part. The span value shall be 100 ppm CO instead of 1,000 ppm, and the relative accuracy limit shall be 10 percent of the average CO emissions or 5 ppm CO, whichever is greater. For instruments that are identical to Method 10 and employ the sample conditioning system of Method 10A, the alternative relative accuracy test procedure in §10.1 of Performance Specification 2 may be used in place of the relative accuracy test.

(3) For fuel gas combustion devices subject to §60.104(a)(1), an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO_2 emissions into the atmosphere (except where an H_2S monitor is installed under paragraph (a)(4) of this section). The monitor shall include an oxygen monitor for correcting the data for excess air.

(i) The span values for this monitor are 50 ppm SO_2 and 25 percent oxygen (O_2).

(ii) The SO_2 monitoring level equivalent to the H_2S standard under §60.104(a)(1) shall be 20 ppm (dry basis, zero percent excess air).

(iii) The performance evaluations for this SO_2 monitor under §60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for

conducting the relative accuracy evaluations. Method 6 samples shall be taken at a flow rate of approximately 2 liters/min for at least 30 minutes. The relative accuracy limit shall be 20 percent or 4 ppm, whichever is greater, and the calibration drift limit shall be 5 percent of the established span value.

(iv) Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location (i.e., after one of the combustion devices), if monitoring at this location accurately represents the SO_2 emissions into the atmosphere from each of the combustion devices.

(4) In place of the SO_2 monitor in paragraph (a)(3) of this section, an instrument for continuously monitoring and recording the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

(i) The span value for this instrument is 425 mg/dscm H_2S.

(ii) Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

(iii) The performance evaluations for this H_2S monitor under §60.13(c) shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

(5) For Claus sulfur recovery plants with oxidation control systems or reduction control systems followed by incineration subject to §60.104(a)(2)(i), an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of SO_2 emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

(i) The span values for this monitor are 500 ppm SO_2 and 25 percent O_2.

(ii) The performance evaluations for this SO_2 monitor under §60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

(6) For Claus sulfur recovery plants with reduction control systems not followed by incineration subject to §60.104(a)(2)(ii), an instrument for continuously monitoring and recording the concentration of reduced sulfur and O_2 emissions into the atmosphere. The reduced sulfur emissions shall be calculated as SO_2 (dry basis, zero percent excess air).

(i) The span values for this monitor are 450 ppm reduced sulfur and 25 percent O_2.

(ii) The performance evaluations for this reduced sulfur (and O_2) monitor under §60.13(c) shall use Performance Specification 5 of Appendix B of this Part (and Performance Specification 3 of Appendix B of this Part for the O_2 analyzer). Methods 15 or 15A and Method 3 shall be used for conducting the relative

accuracy evaluations. If Method 3 yields O_2 concentrations below 0.25 percent during the performance specification test, the O_2 concentration may be assumed to be zero and the reduced sulfur CEMS need not include an O_2 monitor.

(7) In place of the reduced sulfur monitor under paragraph (a)(6) of this section, an instrument using 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, zero percent excess air) of the resultant SO_2. The monitor shall include an oxygen monitor for correcting the data for excess oxygen.

(i) The span values for this monitor are 375 ppm SO_2 and 25 percent O_2.

(ii) For reporting purposes, the SO_2 exceedance level for this monitor is 250 ppm (dry basis, zero percent excess air).

(iii) The performance evaluations for this SO_2 (and O_2) monitor under §60.13(c) shall use Performance Specification 5. Methods 15 or 15A and Method 3 shall be used for conducting the relative accuracy evaluations.

(8) An instrument for continuously monitoring and recording concentrations of SO_2 in the gases at both the inlet and outlet of the SO_2 control device from any fluid catalytic cracking unit catalyst regenerator for which the owner or operator seeks to comply with §60.104(b)(1).

(i) The span value of the inlet monitor shall be set 125 percent of the maximum estimated hourly potential SO_2 emission concentration entering the control device, and the span value of the outlet monitor shall be set at 50 percent of the maximum estimated hourly potential sulfur dioxide emission concentration entering the control device.

(ii) The performance evaluations for these SO_2 monitors under §60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

(9) An instrument for continuously monitoring and recording concentrations of SO_2 in the gases discharged into the atmosphere from any fluid catalytic cracking unit catalyst regenerator for which the owner or operator seeks to comply specifically with the 50 ppmv emission limit under §60.104(b)(1).

(i) The span value of the monitor shall be set at 50 percent of the maximum hourly potential SO_2 emission concentration of the control device.

(ii) The performance evaluations for this SO_2 monitor under §60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

(10) An instrument for continuously monitoring and recording concentrations of oxygen (O_2) in the gases at both the inlet and outlet of the sulfur dioxide control device (or the outlet only if specifically complying with the 50 ppmv standard) from any fluid catalytic cracking unit catalyst regenerator for which the owner or operator has elected to comply with §60.104(b)(1). The span of this continuous monitoring system shall be set at 10 percent.

(11) The continuous monitoring systems under paragraphs (a)(8), (a)(9), and (a)(10) of this section are operated and data recorded during all periods of operation of the affected facility including periods of startup, shutdown, or malfunction, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

(12) The owner or operator shall use the following procedures to evaluate the continuous monitoring systems under paragraphs (a)(8), (a)(9), and (a)(10) of this section.

(i) Method 3 or 3A and Method 6 or 6C for the relative accuracy evaluations under the §60.13(e) performance evaluation.

(ii) Appendix F, Procedure 1, including quarterly accuracy determinations and daily calibration drift tests.

(13) When seeking to comply with §60.104(b)(1), when emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using one of the following methods to provide emission data for a minimum of 18 hours per day in at least 22 out of 30 rolling successive calendar days.

(i) The test methods as described in §60.106(k);

(ii) A spare continuous monitoring system; or

(iii) Other monitoring systems as approved by the Administrator.

(b) [Reserved]

(c) The average coke burn-off rate (Mg (tons) per hour) and hours of operation shall be recorded daily for any fluid catalytic cracking unit catalyst regenerator subject to §60.102, §60.103, or §60.104(b)(2).

(d) For any fluid catalytic cracking unit catalyst regenerator under §60.102 that uses an incinerator-waste heat boiler to combust the exhaust gases from the catalyst regenerator, the owner or operator shall record daily the rate of combustion of liquid or solid fossil-fuels and the hours of operation during which liquid or solid fossil-fuels are combusted in the incinerator-waste heat boiler.

(e) For the purpose of reports under §60.7(c), periods of excess emissions that shall be determined and reported are defined as follows:

NOTE: All averages, except for opacity, shall be determined as the arithmetic average of the applicable 1-hour averages, e.g., the rolling 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages

(1) *Opacity*. All 1-hour periods that contain two or more 6-minute periods during which the average opacity as measured by the continuous monitoring system under §60.105(a)(1) exceeds 30 percent.

(2) *Carbon monoxide*. All 1-hour periods during which the average CO concentration as measured by the CO continuous monitoring system under §60.105(a)(2) exceeds 500 ppm.

(3) *Sulfur dioxide from fuel gas combustion*.

(i) All rolling 3-hour periods during which the average concentration of SO_2 as measured by the SO_2 continuous monitoring system under §60.105(a)(3) ex ceeds 20 ppm (dry basis, zero percent excess air); or

(ii) All rolling 3-hour periods during which the average concentration of H_2S as measured by the H_2S continuous monitoring system under §60.105(a)(4) exceeds 230 mg/dscm (0.10 gr/dscf).

(4) *Sulfur dioxide from Claus sulfur recovery plants*.

(i) All 12-hour periods during which the average concentration of SO_2 as measured by the SO_2 continuous monitoring system under §60.105(a)(5) exceeds 250 ppm (dry basis, zero percent excess air); or

(ii) All 12-hour periods during which the average concentration of reduced sulfur (as SO_2) as measured by the reduced sulfur continuous monitoring system under §60.105(a)(6) exceeds 300 ppm; or

(iii) All 12-hour periods during which the average concentration of SO_2 as measured by the SO_2 continuous monitoring system under §60.105(a)(7) exceeds 250 ppm (dry basis, zero percent excess air).

156. 40 CFR 60.106 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator 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 §60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter (PM) standards in §60.102(a) as follows:

(1) The emission rate (E) of PM shall be computed for each run using the following equation:

$E = (c_s Q_{sd)} / (KR_c)$

where:

E = Emission rate of PM, kg/Mg (lb/ton) of coke burn-off;
c_s = Concentration of PM, g/dscm (gr/dscf);
Q_{sd} = Volumetric flow rate of effluent gas, dscm/hr (dscf/hr);
R_c = Coke burn-off rate, Mg/hr (ton/hr) coke; and
K=Conversion factor, 1,000 g/kg (7,000 gr/lb).

(2) Method 5B or 5F is to be used to determine particulate matter emissions and associated moisture content from affected facilities without wet FGD systems; only Method 5B is to be used after wet FGD systems. The sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.015 dscm/min (0.53 dscf/min), except that shorter sampling times may be approved by the Administrator when process variables or other factors preclude sampling for at least 60 minutes.

(3) The coke burn-off rate (R_c) shall be computed for each run using the following equation:

$R_c=K_1Q_r(\%CO_2+\%CO)- (K_2Q_a-K_3Q_r)((\%CO/2) + (\%CO_2+\%O_2))$

where:

R_c = Coke burn-off rate, Mg/hr (ton/hr);
Q_r = Volumetric flow rate of exhaust gas from catalyst regenerator before entering the emission control system, dscm/min (dscf/min);
Q_a = Volumetric flow rate of air to FCCU regenerator, as determined from the fluid catalytic cracking unit control room instrumentation, dscm/min (dscf/min);
$\%CO_2$ = Carbon dioxide concentration, percent by volume (dry basis);
%CO = Carbon monoxide concentration, percent by volume (dry basis);
$\%O_2$ = Oxygen concentration, percent by volume (dry basis);
K_1 = Material balance and conversion factor, 2.982×10^{-4} (Mg-min)/(hr-dscm-%) [9.31×10^{-6} (ton-min)/(hr-dscf-%)];
K_2 = Material balance and conversion factor, 2.088×10^{-3} (Mg-min)/(hr-dscm-%) [6.52×10^{-5} (ton-min)/(hr-dscf-%)]; and
K_3 = Material balance and conversion factor, 9.94×10^{-5} (Mg-min)/(hr-dscm-%) [3.1×10^{-6} (ton-min)/(hr-dscf-%)].

(i) Method 2 shall be used to determine the volumetric flow rate (Q_r).

(ii) The emission correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine CO_2, CO, and O_2 concentrations.

(4) Method 9 and the procedures of §60.11 shall be used to determine opacity.

(c) If auxiliary liquid or solid fossil-fuels are burned in an incinerator-waste heat boiler, the owner or operator shall determine the emission rate of PM permitted in §60.102(b) as follows:

(1) The allowable emission rate (E_s) of PM shall be computed for each run using the following equation:

$$E = F + A(H/R_c)$$

where:

E_s = Emission rate of PM allowed, kg/Mg (lb/ton) of coke burn-off in catalyst regenerator;
F=Emission standard, 1.0 kg/Mg (2.0 lb/ton) of coke burn-off in catalyst regenerator;
A = Allowable incremental rate of PM emissions, 7.5×10^{-4} kg/million J (0.10 lb/million Btu);
H = Heat input rate from solid or liquid fossil fuel, million J/hr (million Btu/hr); and
R_c = Coke burn-off rate, Mg coke/hr (ton coke/hr).

(2) Procedures subject to the approval of the Administrator shall be used to determine the heat input rate.

(3) The procedure in paragraph (b)(3) of this section shall be used to determine the coke burn-off rate (R_c).

(d) The owner or operator shall determine compliance with the CO standard in §60.103(a) by using the integrated sampling technique of Method 10to determine the CO concentration (dry basis). The sampling time for each run shall be 60 minutes.

(e) (1) The owner or operator shall determine compliance with the H_2S standard in §60.104(a)(1) as follows: Method 11, 15, 15A, or 16 shall be used to determine the H_2S concentration. The gases entering the sampling train should be at about atmospheric pressure. If the pressure in the refinery fuel gas lines is relatively high, a flow control valve may be used to reduce the pressure. If the line pressure is high enough to operate the sampling train without a vacuum pump, the pump may be eliminated from the sampling train. The sample shall be drawn from a point near the centroid of the fuel gas line.

(i) For Method 11, the sampling time and sample volume shall be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times shall be taken at about 1-hour intervals. The arithmetic average of these two samples shall constitute a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H_2S may necessitate sampling for longer periods of time.

(ii) For Method 15 or 16, at least three injects over a 1-hour period shall constitute a run.

(iii) For Method 15A, a 1-hour sample shall constitute a run.

(2) Where emissions are monitored by §60.105(a)(3), compliance with §60.105(a)(1) shall be determined using Method 6 or 6C and Method 3 or 3A. A 1-hour sample shall constitute a run. Method 6 samples shall be taken at a rate of approximately 2 liters/min. The ppm correction factor (Method 6) and the sampling location in paragraph (f)(1) of this section apply. Method 4 shall be used to determine the moisture content of the gases. The sampling point for Method 4 shall be adjacent to the sampling point for Method 6 or 6C.

(f) The owner or operator shall determine compliance with the SO_2 and the H_2S and reduced sulfur standards in §60.104(a)(2) as follows:

(1) Method 6 shall be used to determine the SO_2 concentration. The concentration in mg/dscm obtained by Method 6or 6C is multiplied by 0.3754 to obtain the concentration in ppm. The sampling point in the duct shall be the centroid of the cross section if the cross-sectional area is less than 5.00 m^2 (53.8 ft^2) or at a point no closer to the walls than 1.00 m (39.4 in.) if the cross-sectional area is 5.00 m^2 or more and the centroid is more than 1 m from the wall. The sampling time and sample volume shall be at least 10 minutes and 0.010 dscm (0.35 dscf) for each sample. Eight samples of equal sampling times shall be taken at about 30-minute intervals. The arithmetic average of these eight samples shall constitute a run. For Method 6C, a run shall consist of the arithmetic average of four 1-hour samples. Method 4 shall be used to determine the moisture content of the gases. The sampling point for Method 4 shall be adjacent to the sampling point for Method 6 or 6C. The sampling time for each sample shall be equal to the time it takes for two Method 6 samples. The moisture content from this sample shall be used to correct the corresponding Method 6 samples for moisture. For documenting the oxidation efficiency of the control device for reduced sulfur compounds, Method 15 shall be used following the procedures of paragraph (f)(2)of this section.

(2) Method 15 shall be used to determine the reduced sulfur and H_2S concentrations. Each run shall consist of 16 samples taken over a minimum of 3 hours. The sampling point shall be the same as that described for Method 6 in paragraph (f)(1) of this section. To ensure minimum residence time for the sample inside the sample lines, the sampling rate shall be at least 3.0 lpm (0.10 cfm). The SO_2 equivalent for each run shall be calculated after being corrected for moisture and oxygen as the arithmetic average of the SO_2 equivalent for each sample during the run. Method 4 shall be used to determine the moisture content of the gases as the paragraph (f)(1) of this section. The sampling time for each sample shall be equal to the time it takes for four Method 15 samples.

(3) The oxygen concentration used to correct the emission rate for excess air shall be obtained by the integrated sampling and analysis procedure of Method 3or 3A. The samples shall be taken simultaneously with the SO_2, reduced sulfur and H_2S, or moisture samples. The SO_2, reduced sulfur, and H_2S samples shall be corrected to zero percent excess air using the equation in paragraph (h)(6) of this section.

(g) Each performance test conducted for the purpose of determining compliance under §60.104(b) shall consist of all testing performed over a 7-day period using Method 6 or 6C and Method 3 or

3A. To determine compliance, the arithmetic mean of the results of all the tests shall be compared with the applicable standard.

(h) For the purpose of determining compliance with §60.104(b)(1), the following calculation procedures shall be used:

(1) Calculate each 1-hour average concentration (dry, zero percent oxygen, ppmv) of sulfur dioxide at both the inlet and the outlet to the add-on control device as specified in §60.13(h). These calculations are made using the emission data collected under §60.105(a).

(2) Calculate a 7-day average (arithmetic mean) concentration of sulfur dioxide for the inlet and for the outlet to the add-on control device using all of the 1-hour average concentration values obtained during seven successive 24-hour periods.

(3) Calculate the 7-day average percent reduction using the following equation:

$Rso_2=100(Cso_2(i)-Cso_2(o)) /Cso_2(i)$

where:

Rso_2=7-day average sulfur dioxide emission reduction, percent;
$Cso_2(i)$=sulfur dioxide emission concentration determined in §60.106(h)(2) at the inlet to the add-on control device, ppmv;
$Cso_2(o)$=sulfur dioxide emission concentration determined in §60.106(h)(2) at the outlet to the add-on control device, ppmv; and
100=conversion factor, decimal to percent.

(4) Outlet concentrations of sulfur dioxide from the add-on control device for compliance with the 50 ppmv standard, reported on a dry, O_2-free basis, shall be calculated using the procedures outlined §60.106(h)(1) and (2) above, but for the outlet monitor only.

(5) If supplemental sampling data are used for determining the 7-day averages under paragraph (h) of this section and such data are not hourly averages, then the value obtained for each supplemental sample shall be assumed to represent the hourly average for each hour over which the sample was obtained.

(6) For the purpose of adjusting pollutant concentrations to zero percent oxygen, the following equation shall be used:

$C_{adj}=C_{meas}[20.9_c/(20.9- \%O_2)]$

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; and
$\%O_2$=oxygen concentration measured on a dry basis, percent.

(i) For the purpose of determining compliance with §60.104(b)(2), the following reference methods and calculation procedures shall be used except as provided in paragraph (i)(12) of this section:

(1) One 3-hour test shall be performed each day.

(2) For gases released to the atmosphere from the fluid catalytic cracking unit catalyst regenerator:

(i) Method 8 as modified in §60.106(i)(3) for moisture content and for the concentration of sulfur oxides calculated as sulfur dioxide.

(ii) Method 1 for sample and velocity traverses,

(iii) Method 2 calculation procedures (data obtained from Methods 3and 8) for velocity and volumetric flow rate, and

(iv) Method 3 for gas analysis.

(3) Method 8 shall be modified by the insertion of a heated glass fiber filter between the probe and first impinger. The probe liner and glass fiber filter temperature shall be maintained above 160°C (320°F). The isopropanol impinger shall be eliminated. Sample recovery procedures described in Method 8 for container No. 1 shall be eliminated. The heated glass fiber filter also shall be excluded; however, rinsing of all connecting glassware after the heated glass fiber filter shall be retained and included in container No. 2. Sampled volume shall be at least 1 dscm.

(4) For Method 3, the integrated sampling technique shall be used.

(5) Sampling time for each run shall be at least 3 hours.

(6) All testing shall be performed at the same location. Where the gases discharged by the fluid catalytic cracking unit catalyst regenerator pass through an incinerator-waste heat boiler in which auxiliary or supplemental gaseous, liquid, or solid fossil fuel is burned, testing shall be conducted at a point between the regenerator outlet and the incinerator-waste heat boiler. An alternative sampling location after the waste heat boiler may be used if alternative coke burn-off rate equations, and, if requested, auxiliary/supplemental fuel SO_X credits, have been submitted to and approved by the Administrator prior to sampling.

(7) Coke burn-off rate shall be determined using the procedures specified under paragraph (b)(3) of this section, unless paragraph (i)(6) of this section applies.

(8) Calculate the concentration of sulfur oxides as sulfur dioxide using equation 8-3 in Section 6.5 of Method 8to calculate and report the total concentration of sulfur oxides as sulfur dioxide (Cso_x).

(9) Sulfur oxides emission rate calculated as sulfur dioxide shall be determined for each test run by the following equation:

$$E_{SOx} = C_{SOx}Q_{sd} / K$$

where:

E_{SOx} = sulfur oxides emission rate calculated as sulfur dioxide, kg/hr (lb/hr);
C_{SOx} = sulfur oxides emission concentration calculated as sulfur dioxide, g/dscm (gr/dscf);
Q_{sd} = dry volumetric stack gas flow rate corrected to standard conditions, dscm/hr (dscf/hr); and
K=1,000 g/kg (7,000 gr/lb).

(10) Sulfur oxides emissions calculated as sulfur dioxide shall be determined for each test run by the following equation:

$$R_{SOx} = (E_{SOx} / R_c)$$

where:

R_{SOx} = Sulfur oxides emissions calculated as kg sulfur dioxide per Mg (lb/ton) coke burn-off;
E_{SOx} = Sulfur oxides emission rate calculated as sulfur dioxide, kg/hr (lb/hr); and
R_c = Coke burn-off rate, Mg/hr (ton/hr).

(11) Calculate the 7-day average sulfur oxides emission rate as sulfur dioxide per Mg (ton) of coke burn-off by dividing the sum of the individual daily rates by the number of daily rates summed.

(12) An owner or operator may, upon approval by the Administrator, use an alternative method for determining compliance with §60.104(b)(2), as provided in §60.8(b). Any requests for approval must include data to demonstrate to the Administrator that the alternative method would produce results adequate for the determination of compliance.

(j) For the purpose of determining compliance with §60.104(b)(3), the following analytical methods and calculation procedures shall be used:

(1) One fresh feed sample shall be collected once per 8-hour period.

(2) Fresh feed samples shall be analyzed separately by using any one of the following applicable analytical test methods: ASTM D129-64, 78, or 95 (Reapproved 1978), ASTM D1552-83 or 95, ASTM D2622-87, 94, or 98 or ASTM D1266-87, 91, or 98.

(These methods are incorporated by reference: see §60.17.) The applicable range of some of these ASTM methods is not adequate to measure the levels of sulfur in some fresh feed samples. Dilution of samples prior to analysis with verification of the dilution ratio is acceptable upon prior approval of the Administrator.

(3) If a fresh feed sample cannot be collected at a single location, then the fresh feed sulfur content shall be determined as follows:

(i) Individual samples shall be collected once per 8-hour period for each separate fresh feed stream charged directly into the riser or reactor of the fluid catalytic cracking unit. For each sample location the fresh feed volumetric flow rate at the time of collecting the fresh feed sample shall be measured and recorded. The same method for measuring volumetric flow rate shall be used at all locations.

(ii) Each fresh feed sample shall be analyzed separately using the methods specified under paragraph (j)(2) of this section.

(iii) Fresh feed sulfur content shall be calculated for each 8-hour period using the following equation:

$$S_f = \sum_{i=1}^{n} \frac{S_i Q_i}{Q_f}$$

where:

S_f = fresh feed sulfur content expressed in percent by weight of fresh feed;
n = number of separate fresh feed streams charged directly to the riser or reactor of the fluid catalytic cracking unit;
Q_f = total volumetric flow rate of fresh feed charged to the fluid catalytic cracking unit;
S_i = fresh feed sulfur content expressed in percent by weight of fresh feed for the "ith" sampling location; and
Q_i = volumetric flow rate of fresh feed stream for the "ith" sampling location.

(4) Calculate a 7-day average (arithmetic mean) sulfur content of the fresh feed using all of the fresh feed sulfur content values obtained during seven successive 24-hour periods.

(k) The test methods used to supplement continuous monitoring system data to meet the minimum data requirements in §60.104(d) will be used as described below or as otherwise approved by the Administrator.

(1) Methods 6, 6B, or 8 are used. The sampling location(s) are the same as those specified for the monitor.

(2) For Method 6, the minimum sampling time is 20 minutes and the minimum sampling volume is 0.02 dscm (0.71 dscf) for each sample. Samples are taken at approximately

60-minute intervals. Each sample represents a 1-hour average. A minimum of 18 valid samples is required to obtain one valid day of data.

(3) For Method 6B, collection of a sample representing a minimum of 18 hours is required to obtain one valid day of data.

(4) For Method 8, the procedures as outlined in this section are used. The equivalent of 16 hours of sampling is required to obtain one valid day of data.

157. 40 CFR 60.107 Reporting and record keeping requirements.

(a) Each owner or operator subject to §60.104(b) shall notify the Administrator of the specific provisions of §60.104(b) with which the owner or operator seeks to comply. Notification shall be submitted with the notification of initial startup required by §60.7(a)(3). If an owner or operator elects at a later date to comply with an alternative provision of §60.104(b), then the Administrator shall be notified by the owner or operator in the report described in paragraph (c) of this section.

(b) Each owner or operator subject to §60.104(b) shall record and maintain the following information:

(1) If subject to §60.104(b)(1),

(i) All data and calibrations from continuous monitoring systems located at the inlet and outlet to the control device, including the results of the daily drift tests and quarterly accuracy assessments required under appendix F, Procedure 1;

(ii) Measurements obtained by supplemental sampling (refer to §60.105(a)(13) and §60.106(k)) for meeting minimum data requirements; and

(iii) The written procedures for the quality control program required by appendix F, Procedure 1.

(2) If subject to §60.104(b)(2), measurements obtained in the daily Method 8 testing, or those obtained by alternative measurement methods, if §60.106(i)(12) applies.

(3) If subject to §60.104(b)(3), data obtained from the daily feed sulfur tests.

(4) Each 7-day rolling average compliance determination.

(c) Each owner or operator subject to §60.104(b) shall submit a report except as provided by paragraph (d) of this section. The following information shall be contained in the report:

(1) Any 7-day period during which:

(i) The average percent reduction and average concentration of sulfur dioxide on a dry, O_2-free basis in the gases discharged to the atmosphere from any fluid cracking unit catalyst regenerator for which the owner or operator seeks to comply with §60.104(b)(1) is below 90 percent and above 50 vppm, as measured by the continuous monitoring system prescribed under §60.105(a)(8), or above 50 vppm, as measured by the outlet continuous monitoring system prescribed under §60.105(a)(9). The average percent reduction and average sulfur dioxide concentration shall be determined using the procedures specified under §60.106(h);

(ii) The average emission rate of sulfur dioxide in the gases discharged to the atmosphere from any fluid catalytic cracking unit catalyst regenerator for which the owner or operator seeks to comply with §60.104(b)(2) exceeds 9.8 kg SO_X per 1,000 kg coke burn-off, as measured by the daily testing prescribed under §60.106(i). The average emission rate shall be determined using the procedures specified under §60.106(i); and

(iii) The average sulfur content of the fresh feed for which the owner or operator seeks to comply with §60.104(b)(3) exceeds 0.30 percent by weight. The fresh feed sulfur content, a 7-day rolling average, shall be determined using the procedures specified under §60.106(j).

(2) Any 30-day period in which the minimum data requirements specified in §60.104(d) are not obtained.

(3) For each 7-day period during which an exceedance has occurred as defined in paragraphs (c)(1)(i) through (c)(1)(iii) and (c)(2) of this section:

(i) The date that the exceedance occurred;

(ii) An explanation of the exceedance;

(iii) Whether the exceedance was concurrent with a startup, shutdown, or malfunction of the fluid catalytic cracking unit or control system; and

(iv) A description of the corrective action taken, if any.

(4) If subject to §60.104(b)(1),

(i) The dates for which and brief explanations as to why fewer than 18 valid hours of data were obtained for the inlet continuous monitoring system;

(ii) Identification of times when hourly averages have been obtained based on manual sampling methods;

(iii) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system; and

(iv) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

(v) Results of daily drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(5) If subject to §60.104(b)(2), for each day in which a Method 8sample result required by §60.106(i) was not obtained,the date for which and brief explanation as to why a Method 8 sample result was not obtained, for approval by the Administrator.

(6) If subject to §60.104(b)(3), for each 8-hour period in which a feed sulfur measurement required by §60.106(j) was not obtained, the date for which and brief explanation as to why a feed sulfur measurement was not obtained, for approval by the Administrator.

(d) For any periods for which sulfur dioxide or oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

(e) The owner or operator of an affected facility shall submit the reports required under this subpart to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.

(f) The owner or operator of the affected facility shall submit a signed statement certifying the accuracy and completeness of the information contained in the report.

158. 40 CFR 60.108 Performance test and compliance provisions.

(a) Section 60.8(d) shall apply to the initial performance test specified under paragraph (c) of this section, but not to the daily performance tests required thereafter as specified in §60.108(d). Section 60.8(f) does not apply when determining compliance with the standards specified under §60.104(b). Performance tests conducted for the purpose of determining compliance under §60.104(b) shall be conducted according to the applicable procedures specified under §60.106.

(b) Owners or operators who seek to comply with §60.104(b)(3) shall meet that standard at all times, including peri ods of startup, shutdown, and malfunctions.

(c) The initial performance test shall consist of the initial 7-day average calculated for compliance with §60.104(b)(1), (b)(2), or (b)(3).

(d) After conducting the initial performance test prescribed under §60.8, the owner or operator of a fluid catalytic cracking unit catalyst regenerator subject to §60.104(b) shall conduct a performance test for each successive 24-hour period thereafter. The daily performance tests shall be conducted according to the appropriate procedures specified under §60.106. In the event that a sample collected under §60.106(i) or (j) is accidentally lost or conditions occur in which one of the samples must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operators' control, compliance may be determined using available data for the 7-day period.

(e) Each owner or operator subject to §60.104(b) who has demonstrated compliance with one of the provisions of §60.104(b) but a later date seeks to comply with another of the provisions of §60.104(b) shall begin conducting daily performance tests as specified under paragraph (d)of this section immediately upon electing to become subject to one of the other provisions of §60.104(b). The owner or operator shall furnish the Administrator with a written notification of the change in the semiannual report required by §60.107(e).

159. 40 CFR 60.109 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which shall not be delegated to States:

(1) Section 60.105(a)(13)(iii),

(2) Section 60.106(i)(12).

40 CFR Part 60, Subpart A - General Provisions

40 CFR Part 60, Subpart A provides applicability provisions that are pertinent to emissions units affected by 40 CFR Part 60.

[The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart A: J005, P007, P010, P011, P017, P020, P022, P023, P025, P028, P029, P036, P037, P038, P041, P059, P060, P802, B001, B003, B004, B005, B006, B008, B009, B010, B014-B020, B022, B029-B032, T045-T047, T113-T116, T120, T136-T138, T164, T166, T167, T170, T174-T177, and Z003 (Butane Vapor Recovery Unit).]

160. 40 CFR 60.1 Applicability.

(a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of

which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.

(d) This section does not apply to this facility and, as such, has not been included.

161. 40 CFR 60.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 et seq.).

Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.

Affected facility means, with reference to a stationary source, any apparatus to which a standard is applicable.

Alternative method means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Capital expenditure means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.

Clean coal technology demonstration project means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology", up to a total amount of $2,500,000,000 for

commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

Commenced means, with respect to the definition of *new source* in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

Continuous monitoring system means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Equivalent method means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Excess Emissions and Monitoring Systems Performance Report is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.

Existing facility means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

Isokinetic sampling means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

Issuance of a part 70permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

Monitoring device means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

Nitrogen oxides means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.

One-hour period means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Owner or operator means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method.

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Proportional sampling means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

Reactivation of a very clean coal-fired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act.

Reference method means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Run means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

Shutdown means the cessation of operation of an affected facility for any purpose.

Six-minute period means any one of the 10 equal parts of a one-hour period.

Standard means a standard of performance proposed or promulgated under this part.

Standard conditions means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).

Startup means the setting in operation of an affected facility for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:

(1) The provisions of this part; and/or

(2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Volatile Organic Compound means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.

162. 40 CFR 60.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A—ampere
g—gram
Hz—hertz
J—joule
K—degree Kelvin
kg—kilogram
m—meter
m^3—cubic meter
mg—milligram—10^{-3} gram
mm—millimeter—10^{-3} meter
Mg—megagram—10^6 gram
mol—mole
N—newton
ng—nanogram—10^{-9} gram
nm—nanometer—10^{-9} meter
Pa—pascal
s—second
V—volt
W—watt
Ω—ohm
µg—microgram-10^{-6} gram

(b) Other units of measure:

Btu—British thermal unit
°C—degree Celsius (centigrade)
cal—calorie

cfm—cubic feet per minute
cu ft—cubic feet
dcf—dry cubic feet
dcm—dry cubic meter
dscf—dry cubic feet at standard conditions
dscm—dry cubic meter at standard conditions
eq—equivalent
°F—degree Fahrenheit
ft—feet
gal—gallon
gr—grain
g-eq—gram equivalent
hr—hour
in—inch
k—1,000
l—liter
lpm—liter per minute
lb—pound
meq—milliequivalent
min—minute
ml—milliliter
mol. wt.—molecular weight
ppb—parts per billion
ppm—parts per million
psia—pounds per square inch absolute
psig—pounds per square inch gage
°R—degree Rankine
scf—cubic feet at standard conditions
scfh—cubic feet per hour at standard conditions
scm—cubic meter at standard conditions
sec—second
sq ft—square feet
std—at standard conditions

(c) Chemical nomenclature:

CdS—cadmium sulfide
CO—carbon monoxide
CO_2—carbon dioxide
HCl—hydrochloric acid
Hg—mercury
H_2O—water
H_2S—hydrogen sulfide
H_2SO_4—sulfuric acid
N_2—nitrogen
NO—nitric oxide
NO_2—nitrogen dioxide

NO_x—nitrogen oxides
O_2—oxygen
SO_2—sulfur dioxide
SO_3—sulfur trioxide
SO_x—sulfur oxides

(d) Miscellaneous:

A.S.T.M.—American Society for Testing and Materials

163. 40 CFR 60.4 Address.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices.

Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Air Management Division, U.S. Environmental Protection Agency, John F. Kennedy Federal Building, Boston, MA 02203.

Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10278.

Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, Curtis Building, Sixth and Walnut Streets, Philadelphia, PA 19106.

Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 345 Courtland Street, NE., Atlanta, GA 30365.

Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, IL 60604-3590.

Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas); Director; Air, Pesticides, and Toxics Division; U.S. Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202.

Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.

Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, 999 18th Street, Suite 300, Denver, CO 80202-2466.

Region IX (American Samoa, Arizona, California, Guam, Hawaii, Nevada, Northern Mariana Islands), Director, Air Division, U.S. Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105.

Region X (Alaska, Oregon, Idaho, Washington), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 1200 Sixth Avenue, Seattle, WA 98101.

(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:

(KK) State of Ohio:

Note: Only addresses for the State of Ohio are included. Addresses for other state agencies are not applicable.

(i) Medina, Summit and Portage Counties; Director, Akron Regional Air Quality Management District, 177 South Broadway, Akron, OH 44308.

(ii) Stark County: Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-3335.

(iii) Butler, Clermont, Hamilton, and Warren Counties: Air Program Manager, Hamilton County Department of Environmental Services, 1632 Central Parkway, Cincinnati, Ohio 45210.

(iv) Cuyahoga County: Commissioner, Department of Public Health & Welfare, Division of Air Pollution Control, 1925 Saint Clair, Cleveland, Ohio 44114.

(v) Belmont, Carroll, Columbiana, Harrison, Jefferson, and Monroe Counties: Director, North Ohio Valley Air Authority (NOVAA), 814 Adams Street, Steubenville, OH 43952.

(vi) Clark, Darke, Greene, Miami, Montgomery, and Preble Counties: Director, Regional Air Pollution Control Agency (RAPCA) 451 West Third Street, Dayton, Ohio 45402.

(vii) Lucas County and the City of Rossford (in Wood County): Director, Toledo Environmental Services Agency, 26 Main Street, Toledo, OH 43605.

(viii) Adams, Brown, Lawrence, and Scioto Counties; Engineer-Director, Air Division, Portsmouth City Health Department, 740 Second Street, Portsmouth, OH 45662.

(ix) Allen, Ashland, Auglaize, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Marion, Mercer, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Van

Wert, Williams, Wood (except City of Rossford), and Wyandot Counties: Ohio Environmental Protection Agency, Northwest District Office, Air Pollution Control, 347 Dunbridge Rd., Bowling Green, Ohio 43402.

(x) Ashtabula, Holmes, Lorain, and Wayne Counties: Ohio Environmental Protection Agency, Northeast District Office, Air Pollution Unit, 2110 East Aurora Road, Twinsburg, OH 44087.

(xi) Athens, Coshocton, Gallia, Guernsey, Hocking, Jackson, Meigs, Morgan, Muskingum, Noble, Perry, Pike, Ross, Tuscarawas, Vinton, and Washington Counties: Ohio Environmental Protection Agency, Southeast District Office, Air Pollution Unit, 2195 Front Street, Logan, OH 43138.

(xii) Champaign, Clinton, Highland, Logan, and Shelby Counties: Ohio Environmental Protection Agency, Southwest District Office, Air Pollution Unit, 401 East Fifth Street, Dayton, Ohio 45402-2911.

(xiii) Delaware, Fairfield, Fayette, Franklin, Knox, Licking, Madison, Morrow, Pickaway, and Union Counties: Ohio Environmental Protection Agency, Central District Office, Air Pollution Control, 3232 Alum Creek Drive, Columbus, Ohio, 43207-3417.

(xiv) Geauga and Lake Counties: Lake County General Health District, Air Pollution Control, 105 Main Street, Painesville, OH 44077.

(xv) Mahoning and Trumbull Counties: Mahoning-Trumbull Air Pollution Control Agency, 9 West Front Street, Youngstown, OH 44503.

164. 40 CFR 60.5 Determination of construction or modification.

(a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.

(b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

165. 40 CFR 60.6 Review of plans.

(a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.

(b) (1) A separate request shall be submitted for each construction or modification project.

(2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each

affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.

(c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall:

(1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or

(2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.

166. 40 CFR 60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) [Reserved]

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with §60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by §60.8 in lieu of Method 9 observation data as allowed by §60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in §60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in §60.7(c) shall both be submitted.

FIGURE 1**—SUMMARY REPORT— GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE**

Pollutant (Circle One—SO_2/NO_x/ TRS/H_2S/CO/Opacity)
Reporting period dates:
From to
Company:
Emission Limitation
Address:
Monitor Manufacturer and Model No.
Date of Latest CMS Certification or Audit
Process Unit(s) Description:
Total source operating time in reporting period[1]

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-------------------------------+------------------------------- |
 Emission data summary[511]      |  CMS performance summary[521]      |
-------------------------------+------------------------------- |
1. Duration of excess          | 1. CMS downtime in reporting   |
  emissions in reporting       |   period due to:               |
  period due to:               |                                |
   a. Startup/shutdown........ | a. Monitor equipment           |
                               | malfunctions................... |
   b. Control equipment        | b. Non-Monitor equipment       |
    problems................... | malfunctions................... |
   c. Process problems........ | c. Quality assurance           |
                               | calibration.................... |
   d. Other known causes...... | d. Other known causes......... |
   e.Unknown causes........... | e. Unknown causes............. |
2. Total duration of excess    | 2. Total CMS Downtime......... |
  emission.................... |                                |
3. Total duration of excess    | 3. [Total CMS Downtime] X      |
  emissions X (100) [Total     |   (100) [Total source op-      |
```

[511] For opacity, record all times in minutes. For gases, record all times in hours.

[521] For opacity, record all times in minutes. For gases, record all times in hours.

source operating time]%[532] | erating time] %[542] |
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[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

Name

Signature

Title

Date

(e) (1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and

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[532] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

[542] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

(f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows;

(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(g) If notification substantially similar to that in paragraph (a) of this sectionis required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

167. 40 CFR 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or ap proves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit

during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes:

(i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test 1 methods and procedures and

(ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

168. 40 CFR 60.9 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§60.5 and 60.6 is governed by §§2.201 through 2.213 of this chapter and not by §2.301 of this chapter.)

169. 40 CFR 60.10 State authority.

The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:

(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.

(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

170. 40 CFR 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by §60.8, unless otherwise specified in the applicable standard.

(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(e) (1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in §60.8 unless one of the following conditions apply. If no performance test under §60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under §60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in §60.7(a)(6) shall be waived.

The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determing compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under §60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in §60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.

(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by §60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and §60.8 performance test results.

(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under §60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at

least 30 days before any performance test required under §60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine compliance with the opacity standard. during subsequent tests required under §60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under §60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under §60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in §60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity standard.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by §60.8, the opacity observation results and observer certification required by §60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by §60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with §60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission stan dard. The Administrator will promulgate the new opacity standard in the FEDERAL REGISTER.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compli ance test or procedure had been performed.

171. 40 CFR 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

172. 40 CFR 60.13 Monitoring requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix Fis applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under §60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under §60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under §60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under §60.8 and as described in §60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under §60.8 is conducted.

(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d) (1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part, must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of PS-1 in appendix B of this part. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are

obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in §60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners and operators complying with the requirements in §60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng of pollutant per J of heat input). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:

(1) An alternative to the reference method tests for determining relative accuracy is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in section 8.4 of Performance Specification 2 and substitute the procedures in section 16.0 if the results of a performance test conducted according to the requirements in §60.8 of this subpartor other tests performed following the criteria in §60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more

stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissons have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., §60.45(g)(2) and (3), §60.73(e), and §60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 8.4 of Performance Specification 2.

173. 40 CFR 60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based

on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this partshall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and §60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by §60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j) (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;

(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A temporary clean coal control technology demonstration project, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(1) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

174. 40 CFR 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

175. 40 CFR 60.16 Priority list.

Prioritized Major Source Categories

Priority Number[551]	*Source Category*
1.	Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Volatile Organic Liquid Storage Vessels and Handling Equipment
	(a) SOCMI unit processes
	(b) Volatile organic liquid (VOL) storage vessels and handling equipment
	(c) SOCMI fugitive sources
	(d) SOCMI secondary sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4.	Industrial Surface Coating: Paper
5.	Dry Cleaning
	(a) Perchloroethylene
	(b) Petroleum solvent
6.	Graphic Arts
7.	Polymers and Resins: Acrylic Resins
8.	Mineral Wool (Deleted)
9.	Stationary Internal Combustion Engines
10.	Industrial Surface Coating: Fabric
11.	Industrial-Commercial-Institutional Steam Generating Units.
12.	Incineration: Non-Municipal (Deleted)
13.	Non-Metallic Mineral Processing
14.	Metallic Mineral Processing
15.	Secondary Copper (Deleted)
16.	Phosphate Rock Preparation
17.	Foundries: Steel and Gray Iron
18.	Polymers and Resins: Polyethylene
19.	Charcoal Production
20.	Synthetic Rubber
	(a) Tire manufacture

[551] Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.

| (b) SBR production |
21. | Vegetable Oil |
22. | Industrial Surface Coating: Metal Coil |
23. | Petroleum Transportation and Marketing |
24. | By-Product Coke Ovens |
25. | Synthetic Fibers |
26. | Plywood Manufacture |
27. | Industrial Surface Coating: Automobiles |
28. | Industrial Surface Coating: Large Appliances |
29. | Crude Oil and Natural Gas Production |
30. | Secondary Aluminum |
31. | Potash (Deleted) |
32. | Lightweight Aggregate Industry: Clay, Shale, and Slate[562] |
33. | Glass |
34. | Gypsum |
35. | Sodium Carbonate |
36. | Secondary Zinc (Deleted) |
37. | Polymers and Resins: Phenolic |
38. | Polymers and Resins: Urea-Melamine |
39. | Ammonia (Deleted) |
40. | Polymers and Resins: Polystyrene |
41. | Polymers and Resins: ABS-SAN Resins |
42. | Fiberglass |
43. | Polymers and Resins: Polypropylene |
44. | Textile Processing |
45. | Asphalt Processing and Asphalt Roofing Manufacture |
46. | Brick and Related Clay Products |
47. | Ceramic Clay Manufacturing (Deleted) |
48. | Ammonium Nitrate Fertilizer |
49. | Castable Refractories (Deleted) |
50. | Borax and Boric Acid (Deleted) |
51. | Polymers and Resins: Polyester Resins |
52. | Ammonium Sulfate |
53. | Starch |
54. | Perlite |
55. | Phosphoric Acid: Thermal Process (Deleted) |
56. | Uranium Refining |
57. | Animal Feed Defluorination (Deleted) |
58. | Urea (for fertilizer and polymers) |
59. | Detergent (Deleted) |

Other Source Categories

[562] Formerly titled 'Sintering: Clay and Fly Ash'.

Lead acid battery manufacture[573]
Organic solvent cleaning[583]
Industrial surface coating: metal furniture[593]
Stationary gas turbines[604]
Municipal solid waste landfills.4
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[1] Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.

[2] Formerly titled 'Sintering: Clay and Fly Ash'.

[3] Minor source category, but included on list since an NSPS is being developed for that source category.

[4] Not prioritized, since an NSPS for this major source category has already been proumlgated.

176. 40 CFR 60.17 Incorporations by reference.

The materials listed below are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register on the date listed. These materials are incorporated as they exist on the date of the approval, and a notice of any change in these materials will be published in the FEDERAL REGISTER. The materials are available for purchase at the corresponding address noted below, and all are available for inspection at the Office of the Federal Register, Room 8401, 1100 L Street, NW., Washington, DC and at the Library (MD-35), U.S. EPA, Research Triangle Park, NC.

(a) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(1) ASTM A99-76, 82 (Reapproved 1987), Standard Specification for Ferromanganese, incorporation by reference (IBR) approved January 27, 1983 for §60.261.

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[573] Minor source category, but included on list since an NSPS is being developed for that source category.

[583] Minor source category, but included on list since an NSPS is being developed for that source category.

[593] Minor source category, but included on list since an NSPS is being developed for that source category.

[604] Not prioritized, since an NSPS for this major source category has already been proumlgated.

(2) ASTM A100-69, 74, 93, Standard Specification for Ferrosilicon, IBR approved January 27, 1983 for §60.261.

(3) ASTM A101-73, 93, Standard Specification for Ferrochromium, IBR approved January 27, 1983 for §60.261.

(4) ASTM A482-76, 93, Standard Specification for Ferrochromesilicon, IBR approved January 27, 1983 for §60.261.

(5) ASTM A483-64, 74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved January 27, 1983 for §60.261.

(6) ASTM A495-76, 94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved January 27, 1983 for §60.261.

(7) ASTM D86-78, 82, 90, 93, 95, 96, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), and 60.633(h).

(8) ASTM D129-64, 78, 95, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for Appendix A: Method 19, Section 12.5.2.2.3; and §§60.106(j)(2).

(9) ASTM D240-76, 92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved January 27, 1983 for §§60.46(c), 60.296(b), and Appendix A: Method 19, Section 12.5.2.2.3.

(10) ASTM D270-65, 75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.2.1.

(11) ASTM D323-82, 94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved April 8, 1987 for §§60.111(l), 60.111a(g), 60.111b(g), and 60.116b(f)(2)(ii).

(12) ASTM D388-77, 90, 91, 95, 98a, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41(f), 60.45(f)(4)(i), 60.45(f)(4)(ii), 60.45(f)(4)(vi), 60.41a, 60.41b, and 60.251(b) and (c).

(13) ASTM D396-78, 89, 90, 92, 96, 98, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).

(14) ASTM D975-78, 96, 98a, Standard Specification for Diesel Fuel Oils, IBR approved January 27, 1983 for §§60.111(b) and 60.111a(b).

(15) ASTM D1072-80, 90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved July 31, 1984 for §60.335(d).

(16) ASTM D1137-53, 75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved January 27, 1983 for §60.45(f)(5)(i).

(17) ASTM D1193-77, 91, Standard Specification for Reagent Water, IBR approved for Appendix A: Method 5, Section 7.1.3 Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.

(18) ASTM D1266-87, 91, 98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved August 17, 1989 for §§60.106(j)(2).

(19) ASTM D1475-60 (Reapproved 1980), 90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved January 27, 1983 for §60.435(d)(1), Appendix A: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.1.

(20) ASTM D1552-83, 95, Standard Test Method for Sulfur in Petroleum Products (High Temperature Method), IBR approved for Appendix A: Method 19, Section 12.5.2.2.3; and §§60.106(j)(2).

(21) ASTM D1826-77, 94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved January 27, 1983 for §§60.45(f)(5)(ii), 60.46(c)(2), 60.296(b)(3), and Appendix A: Method 19, Section 12.3.2.4.

(22) ASTM D1835-87, 91, 97, Standard Specification for Liquefied Petroleum (LP) Gases, approved for §§60.41b and 60.41c.

(23) ASTM D1945-64, 76, 91, 96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved January 27, 1983 for §60.45(f)(5)(i).

(24) ASTM D1946-77, 90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.45(f)(5)(i), 60.18(f)(3), 60.614(e)(2)(ii), 60.614(e)(4), 60.664(e)(2)(ii), 60.664(e)(4), 60.564(f)(1), 60.704(d)(2)(ii), and 60.704(d)(4).

(25) ASTM D2013-72, 86, Standard Method of Preparing Coal Samples for Analysis, IBR approved January 27, 1983, for Appendix A: Method 19, Section 12.5.2.1.3.

(26) ASTM D2015-77 (Reapproved 1978), 96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved January 27, 1983 for §60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.

(27) ASTM D2016-74, 83, Standard Test Methods for Moisture Content of Wood, IBR approved for Appendix A: Method 28, Section 16.1.1.

(28) ASTM D2234-76, 96, 97b, 98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.1.1.

(29) ASTM D2369-81, 87, 90, 92, 93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved January 27, 1983 for Appendix A: Method 24, Section 6.2.

(30) ASTM D2382-76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.614(e)(4), 60.664(e)(4), 60.564(f)(3), and 60.704(d)(4).

(31) ASTM D2504-67, 77, 88 (Reapproved 1993), Noncondensable Gases in C_3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §60.485(g)(5).

(32) ASTM D2584-68 (Reapproved 1985), 94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved February 25, 1985 for §60.685(c)(3)(i).

(33) ASTM D2622-87, 94, 98, Standard Test Method for Sulfur in Petroleum Products by X-Ray Spectrometry, IBR approved August 17, 1989 for §§60.106(j)(2).

(34) ASTM D2879-83, 96, 97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved April 8, 1987 for §§60.485(e)(1), 60.111b(f)(3), 60.116b(e)(3)(ii), and 60.116b(f)(2)(i).

(35) ASTM D2880-78, 96, Standard Specification for Gas Turbine Fuel Oils, IBR approved January 27, 1983 for §§60.111(b), 60.111a(b), and 60.335(d).

(36) ASTM D2908-74, 91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).

(37) ASTM D2986-71, 78, 95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved January 27, 1983 for Appendix A: Method 5, Section 7.1.1; Method 12, Sec-tion 7.1.1; and Method 13A, Section 7.1.1.2.

(38) ASTM D3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation, IBR approved July 31, 1984 for §60.335(d).

(39) ASTM D3173-73, 87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.1.3.

(40) ASTM D3176-74, 89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved January 27, 1983 for §60.45(f)(5)(i) and Appendix A: Method 19, Section 12.3.2.3.

(41) ASTM D3177-75, 89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.1.3.

(42) ASTM D3178-73 (Reapproved 1979), 89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved January 27, 1983 for §60.45(f)(5)(i).

(43) ASTM D3246-81, 92, 96, Standard Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved July 31, 1984 for §60.335(d).

(44) ASTM D3270-73T, 80, 91, 95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for Appendix A: Method 13A, Section 16.1.

(45) ASTM D3286-85, 96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.

(46) ASTM D3370-76, 95a, Standard Practices for Sampling Water, IBR approved for §60.564(j).

(47) ASTM D3792-79, 91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved January 27, 1983 for Appendix A: Method 24, Section 6.3.

(48) ASTM D4017-81, 90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved January 27, 1983 for Appendix A: Method 24, Section 6.4.

(49) ASTM D4057-81, 95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.3.

(50) ASTM D4084-82, 94, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved July 31, 1984 for §60.335(d).

(51) ASTM D4177-95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, 12.5.2.2.1.

(52) ASTM D4239-85, 94, 97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.

(53) ASTM D4442-84, 92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for Appendix A: Method 28, Section 16.1.1.

(54) ASTM D4444-92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for Appendix A: Method 28, Section 16.1.1.

(55) ASTM D4457-85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1, 1, 1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, IBR approved for Appendix A: Method 24, Section 6.5.

(56) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.564(f)(3), 60.614(d)(4), 60.664(e)(4), and 60.704(d)(4).

(57) ASTM D5403-93, Standard Test Methods for Volatile Content of Radiation Curable Materials. IBR approved September 11, 1995 for Appendix A: Method 24, Section 6.6.

(58) ASTM D5865-98, Standard Test Method for Gross Calorific Value of Coal and Coke. IBR approved for §60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.

(59) ASTM E168-67, 77, 92, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.593(b)(2) and 60.632(f).

(60) ASTM E169-63, 77, 93, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.593(b)(2) and 60.632(f).

(61) ASTM E260-73, 91, 96, General Gas Chromatography Procedures, IBR approved for §§60.593(b)(2) and 60.632(f).

(62) [Reserved]

(63) [Reserved]

(64) ASTM D 6216-98 Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, IBR approved February 6, 2001 for appendix B, PS-1.

(65)—(75) [Withdrawn]

(b) The following material is available for purchase from the Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.

(1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists, 11th edition, 1970, pp. 11-12, IBR approved January 27, 1983 for §§60.204(b)(3), 60.214(b)(3), 60.224(b)(3), 60.234(b)(3).

(c) The following material is available for purchase from the American Petroleum Institute, 1220 L Street NW., Washington, DC 20005.

(1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980, IBR approved January 27, 1983, for §§60.111(i), 60.111a(f), 60.111a(f)(1) and 60.116b(e)(2)(i).

(d) The following material is available for purchase from the Technical Association of the Pulp and Paper Industry (TAPPI), Dunwoody Park, Atlanta, GA 30341.

(1) TAPPI Method T624 os-68, IBR approved January 27, 1983 for §60.285(d)(3).

(e) The following material is available for purchase from the Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.

(1) Method 209A, Total Residue Dried at 103-105°C, in *Standard Methods for the Examination of Water and Wastewater,* 15th Edition, 1980, IBR approved February 25, 1985 for §60.683(b).

(f) The following material is available for purchase from the following address: Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.

(1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance.

(g) The following material is available for purchase from the following address: West Coast Lumber Inspection Bureau, 6980 SW. Barnes Road, Portland, OR 97223.

(1) West Coast Lumber Standard Grading Rules No. 16, pages 5-21 and 90 and 91, September 3, 1970, revised 1984.

(h) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), 345 East 47th Street, New York, NY 10017.

(1) ASME QRO-1-1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§60.56a, 60.54b(a), 60.54b(b), 60.1185(a), 60.1185(c)(2), 60.1675(a), and 60.1675(c)(2).

(2) ASME PTC 4.1-1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for §§60.46b, 60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)(3) and 60.1810(a)(3).

(3) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for §§60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)4), and 60.1810(a)(4).

(i) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 Third Edition (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August, 1993), IIB (January 1995), and III (December 1996). This document may be obtained from the U.S. EPA, Office of Solid Waste and Emergency Response, Waste

Characterization Branch, Washington, DC 20460, and is incorporated by reference for Appendix A to Part 60, Method 29, Sections 7.5.34; 9.2.1; 9.2.3; 10.2; 10.3; 11.1.1; 11.1.3; 13.2.1; 13.2.2; 13.3.1; and Table 29-3.

(j) "Standard Methods for the Examination of Water and Wastewater," 16th edition, 1985. Method 303F: "Determination of Mercury by the Cold Vapor Technique." This document may be obtained from the American Public Health Association, 1015 18th Street, NW., Washington, DC 20036, and is incorporated by reference for Appendix A to Part 60, Method 29, Sections 9.2.3; 10.3; and 11.1.3.

(k) This material is available for purchase from the American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675-2683. You may inspect a copy at EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-124), Room M-1500, 1200 Pennsylvania Ave., NW, Washington, DC.

(1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0-87258-673-5. IBR approved for §60.35e and §60.55c.

(l) This material is available for purchase from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161. You may inspect a copy at EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-125), Room M-1500, 1200 Pennsylvania Ave., NW, Washington, DC

(1) OMB Bulletin No. 93-17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93-192-664. IBR approved for §60.31e.

(m) [Withdrawn]

177. 40 CFR 60.18 General control device requirements.

(a) *Introduction.* This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section. [The following flares at this facility are subject to 40 CFR Part 60.18: TIU Acid Gas Flare (P049); West Flare (P004), and TRP SRU Acid Gas Flare (P050).]

(b) *Flares.* Paragraphs (c) through (f) apply to flares.

(c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

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

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

where:

V_{max} = Maximum permitted velocity, m/sec;
K_1 = Constant, 6.0 volume-percent hydrogen;
K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen; and
X_{H2} = The volume-percent of hydrogen, on a wetbasis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4)(ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares 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. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f) (1) Method 22 of Appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17);

H_i = Net heat of combustion of sample component i, kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated; and

$$K = \text{Constant, } 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right) \left(\frac{g\ mole}{scm}\right) \left(\frac{MJ}{kcal}\right)$$

where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C;

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

(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation:

$$\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$$

where:

V_{max} = Maximum permitted velocity, M/sec;
28.8 = Constant;
31.7 = Constant; and
H_T = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

$$V_{max}=8.706+0.7084\,(H_T)$$

where:

V_{max} = Maximum permitted velocity, m/sec;
8.706 = Constant;
0.7084 = Constant; and
H_T = The net heating value as determined in paragraph (f)(3).

178. 40 CFR 60.19 General notification and reporting requirements.

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapterstandard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f) (1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator in paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this sectioneach time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

Subpart ZZZZ — National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

[The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart ZZZZ: P044, P045, and P054.]

WHAT THIS SUBPART COVERS

179. §63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

180. §63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

181. §63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE with a site-rating of more than 500 brake horsepower located at a major source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE. A stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002. A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) New stationary RICE. A stationary RICE is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(3) Reconstructed stationary RICE. A stationary RICE is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(b) Stationary RICE subject to limited requirements.

(1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(d).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE; or

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE.

(2) A new or reconstructed stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(d) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

182. §63.6595 When do I have to comply with this subpart?

(a) Affected sources.

(1) If you have an existing stationary RICE, you must comply with the applicable emission limitations and operating limitations no later than [3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(2) If you start up your new or reconstructed stationary RICE before [60 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must comply with the applicable emission limitations and operating limitations in this subpart no later than [60 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(3) If you start up your new or reconstructed stationary RICE after [60 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with this subpart within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

EMISSION AND OPERATING LIMITATIONS

183. §63.6600 What emission limitations and operating limitations must I meet?

(a) If you own or operate an existing, new, or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE located at a major source of HAP emissions, you must comply with the emission limitations in Table 1(a) of this subpart and the operating limitations in Table 1(b) of this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB or 4SLB stationary RICE or a new or reconstructed CI stationary RICE located at a major source of HAP emissions, you must

comply with the emission limitations in Table 2(a) of this subpart and the operating limitations in Table 2(b) of this subpart which apply to you.

(c) If you own or operate: an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, or an existing CI stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE, you do not need to comply with the emission limitations in Tables 1(a) and 2(a) of this subpart or operating limitations in Tables 1(b) and 2(b) of this subpart.

GENERAL COMPLIANCE REQUIREMENTS

184. §63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times, except during periods of startup, shutdown, and malfunction.

(b) If you must comply with emission limitations and operating limitations, you must operate and maintain your stationary RICE, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

185. §63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations?

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 of this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than [240 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER] or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by [3 YEARS AND 180 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER] or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

186. §63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

187. §63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions that this subpart specifies in Table 4. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) 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.

(e) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad (Eq.\ 1)$$

where:

C_i = concentration of CO or formaldehyde at the control device inlet,
C_o = concentration of CO or formaldehyde at the control device outlet, and
R = percent reduction of CO or formaldehyde emissions.

You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(1) through (3) of this section.

(1) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \qquad (Eq.\ 2)$$

where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air;
0.209 = Fraction of air that is oxygen, percent/100;
F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu); and
F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

(2) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{CO2} = \frac{5.9}{F_o} \qquad (Eq.\ 3)$$

where:

X_{co2} = CO_2 correction factor, percent.
5.9 = 20.9 percent O_2 - 15 percent O_2, the defined O_2 correction value, percent.

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \qquad (Eq.\ 4)$$

(3) Calculate the NO_x and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

where:
$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

188. §63.6625 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO_2 at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2 concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in §63.8.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

189. §63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1(b) and 2(b) of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

CONTINUOUS COMPLIANCE REQUIREMENTS

190. §63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(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 at all times that the stationary RICE is operating.

(c) 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. You must, however, use all the valid data collected during all other periods.

191. §63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1(a) and 1(b) and Tables 2(a) and 2(b) of this subpart that apply to you according to methods specified in Table 6 of this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1(a) and 1(b) and Tables 2(a) and 2(b) of this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations from the emission or operating limitations 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 startup, shutdown, and malfunction plan. For new and reconstructed stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations.

(e) You must also report each instance in which you did not meet the requirements in Table 8 of this subpart that apply to you. If you own or operate an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing emergency stationary RICE, an existing limited use emergency stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you do not need to comply with the requirements in Table 8 of this subpart. If you own or operate a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE, you do not need to comply with the requirements in Table 8 of this subpart, except for the initial notification requirements.

NOTIFICATIONS, REPORTS, AND RECORDS

192. §63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you must comply with the emission and operating limitations, and you start up your stationary RICE before the effective date of this subpart, you must submit an Initial Notification not later than [120 DAYS AFTER DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(c) If you start up your new or reconstructed stationary RICE on or after the [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE).

(e) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(f) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 of this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 of this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

193. §63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(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 §63.6595 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 your source in §63.6595.

(2) 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 §63.6595.

(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 is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE 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 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 according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy 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, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) 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.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 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 7 of 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 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, 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.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

194. §63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(3), (b)(1) through (b)(3) and (c) 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 requirement in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

195. §63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form 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.

OTHER REQUIREMENTS AND INFORMATION

196. §63.6665 What parts of the General Provisions apply to me?

Table 8 of this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate an existing 2SLB, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE, you do not need to comply with any of the requirements of the General Provisions. If you own or operate a new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE, you do not need to comply with the requirements in the General Provisions except for the initial notification requirements.

197. §63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether 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 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

198. §63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Stat. 2399).

Compression ignition engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature

sufficiently high for auto-ignition, including diesel engines, dual-fuel engines, and engines that are not spark ignition.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

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 emission limitation or operating limitation;

(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 emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to conform to any provision of the applicable startup, shutdown, or malfunction plan, or to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary RICE that operates in an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE may also operate an additional 50 hours per year in non-emergency situations.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that: (1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control; (2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in this section, shall not be aggregated; (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and (4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in this section, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. May be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides ($NO_{x)}$ control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition engine means a type of engine in which a compressed air/fuel mixture is ignited by a timed electric spark generated by a spark plug.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

199. **Tables to Subpart ZZZZ of Part 63**

Table 1a to Subpart ZZZZ of Part 63. Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE:

For each . . .	You must meet one of the following emission limitations . . .
1. 4SRB stationary RICE	a. reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and [THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you may reduce formaldehyde emissions by 75 percent or more until [3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER]. OR b. limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2.

Table 1b to Subpart ZZZZ of Part 63. Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE:

For each . . .	You must meet the following operating limitation . . .

1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and using NSCR	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water from the pressure drop across the catalyst measured during the initial performance test; AND b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750°F and less than or equal to 1250°F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent, if applicable), and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and not using NSCR	comply with any operating limitations approved by the Administrator.

Table 2a to Subpart ZZZZ of Part 63. Emission Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE:

For each . . .	You must meet the following emission limitation . . .
1. 2SLB stationary RICE	a. reduce CO emissions by 58 percent or more**;** OR b. limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2 until [3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

2. 4SLB stationary RICE	a. reduce CO emissions by 93 percent or more; OR b. limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2.
3. CI stationary RICE	a. reduce CO emissions by 70 percent or more; OR b. limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2.

Table 2b to Subpart ZZZZ of Part 63. Operating Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

As stated in §§63.6600, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE**:**

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water from the pressure drop across the catalyst that was measured during the initial performance test; AND b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst	comply with any operating limitations approved by the Administrator.

Table 3 to Subpart ZZZZ of Part 63. Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	reduce CO emissions and not using a CEMS	conduct subsequent performance tests semiannually[a].
2. 4SRB stationary RICE with a brake horsepower ≥5,000	reduce formaldehyde emissions	conduct subsequent performance tests semiannually[a].
3. stationary RICE (all stationary RICE subcategories and all brake horsepower ratings)	limit the concentration of formaldehyde in the stationary RICE exhaust	conduct subsequent performance tests semiannually[a].

a. After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

Table 4 to Subpart ZZZZ of Part 63. Requirements for Performance Tests

As stated in §§63.6610, 63.6620, and 63.6640, you must comply with the following requirements for performance tests:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions	i. measure the O_2 at the inlet and outlet of the control device AND	(1) portable CO and O_2 analyzer	(a) using ASTM D6522-00[a]. Measurements to determine O_2 must be made at the same time as the measurements for CO concentra-tion.
		ii. measure the CO at the inlet and the outlet of the control device	(1) portable CO and O_2 analyzer	(a) using ASTM D6522-00[a]. The CO concentra-tion must be at 15 percent O_2, dry basis.

2. 4SRB stationary RICE	a. reduce formalde-hyde emissions	i. select the sampling port location and the number of traverse points AND	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) sampling sites must be located at the inlet and outlet of the control device.
		ii. measure O_2 at the inlet and outlet of the control device AND	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A	(a) measurements to determine O_2 concentra-tion must be made at the same time as the measurements for formaldehyde concentra-tion.
		iii. measure moisture content at the inlet and outlet of the control device AND	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentra-tion.

		iv. measure formalde-hyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[b], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) formaldehyde concentra-tion must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. stationary RICE	a. limit the concentra-tion of formalde-hyde in the stationary RICE exhaust	i. select the sampling port location and the number of traverse points AND	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) if using a control device, the sampling site must be located at the outlet of the control device.
		ii. determine the O_2 concentra-tion of the station-ary RICE exhaust at the sampling port location AND	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A	(a) measurements to determine O_2 concentra-tion must be made at the same time and location as the measurements for formaldehyde concentra-tion.

	iii. measure moisture content of the station-ary RICE exhaust at the sampling port location AND	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentra-tion.
	iv. measure formalde-hyde at the exhaust of the station-ary RICE	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[b], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[a] You may also use Methods 3A and 10 as options to ASTM-D6522-00. You may obtain a copy of ASTM-D6522-00 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.
[b] You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

Table 5 to Subpart ZZZZ of Part 63. Initial Compliance with Emission Limitations and Operating Limitations

As stated in §§63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions and using oxidation catalyst, and using a CPMS	i. the average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; AND ii. you have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); AND iii. you have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions and not using oxidation catalyst	i. the average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction. AND ii. you have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); AND iii. you have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions, and using a CEMS	i. you have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); AND ii. you have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B;

		AND iii. the average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE	a. reduce formaldehyde emissions and using NSCR	i. the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; AND ii. you have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); AND iii. you have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE	a. reduce formaldehyde emissions and not using NSCR	i. the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction. AND ii. you have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); AND iii. you have recorded the approved operating parameters (if any) during the initial performance test.
6. stationary RICE	a. limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation	i. the average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation.

	catalyst or NSCR	AND ii. you have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); AND iii. you have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. stationary RICE	a. limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. the average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation. AND ii. you have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); AND iii. you have recorded the approved operating parameters (if any) during the initial performance test.

Table 6 to Subpart ZZZZ of Part 63. Continuous Compliance with Emission Limitations and Operating Limitations

As stated in §63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; AND

		ii. collecting the catalyst inlet temperature data according to §63.6625(b); AND iii. reducing these data to 4-hour rolling averages; AND iv. maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature established during the initial performance test; AND v. measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; AND ii. collecting the approved operating parameter (if any) data according to §63.6625(b); AND iii. reducing these data to 4-hour rolling averages; AND iv. maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established

		during the performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions and using a CEMS	i. collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; AND ii. demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; AND iii. conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE	a. reduce formaldehyde emissions and using NSCR	i. collecting the catalyst inlet temperature data according to §63.6625(b); AND ii. reducing these data to 4-hour rolling averages; AND iii. maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature established during the performance test; AND iv. measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

5. 4SRB stationary RICE	a. reduce formaldehyde emissions and not using NSCR	i. collecting the approved operating parameter (if any) data according to §63.6625(b); AND ii. reducing these data to 4-hour rolling averages; AND iii. maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake horsepower ≥5,000	reduce formaldehyde emissions	conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved[a].

7. stationary RICE	limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]. AND ii. collecting the catalyst inlet temperature data according to §63.6625(b); AND iii. reducing these data to 4-hour rolling averages; AND iv. maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature established during the initial performance test; AND v. measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. stationary RICE	limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]. AND ii. collecting the approved operating parameter (if any) data according to §63.6625(b); AND ii. reducing these data to 4-hour rolling

	averages; AND iii. maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

[a]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

Table 7 to Subpart ZZZZ of Part 63. Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

You must submit a(n)	The report must contain ...	You must submit the report ...
1. compliance report	a. if there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period.	i. semiannually according to the requirements in §63.6650(b).
	OR	
	b. if you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e).	i. semiannually according to the requirements in §63.6650(b).
	OR	
	c. if you had a startup, shutdown or	

	malfunction during the reporting period, the information in §63.10(d)(5)(i).	
		i. semiannually according to the requirements in §63.6650(b).
2. an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with your startup, shutdown, or malfunction plan during the reporting period	a. actions taken for the event.	i. by fax or telephone within 2 working days after starting actions inconsistent with the plan.
	AND	
	b. the information in §63.10(d)(5)(ii).	i. by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authorities. (§63.10(d)(5)(ii))
3. Report	a. the fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis.	annually, according to the requirements in §63.6650.
	AND	
	b. the operating limits provided in your federally enforceable permit, and any deviations from these limits.	
	AND	

	c. any problems or errors suspected with the meters		

Table 8 to Subpart ZZZZ of Part 63. Applicability of General Provisions to Subpart ZZZZ

As stated in §63.6665, you must comply with the following applicable general provisions:

General Provisions Citation	Subject of Citation	Applies to Subpart	Explanation
§63.1	General applicability of the General Provisions	Yes	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes	
§63.4	Prohibited activities and circumvention	Yes	
§63.5	Construction and reconstruction	Yes	
§63.6(a)	Applicability	Yes	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes	
§63.6(b)(5)	Notification	Yes	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes	
§63.6(d)	[Reserved]		

§63.6(e)(1)	Operation and maintenance	Yes	
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, shutdown, and malfunction plan	Yes	
§63.6(f)(1)	Applicability of standards except during startup shutdown malfunction (SSM)	Yes	
§63.6(f)(2)	Methods for determining compliance	Yes	
§63.6(f)(3)	Finding of compliance	Yes	
§63.6(g)(1)-(3)	Use of alternate standard	Yes	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes	
§63.6(j)	Presidential compliance exemption	Yes	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §63.6610.
§63.7(a)(3)	CAA section 114 authority	Yes	
§63.7(b)(1)	Notification of performance test	Yes	
§63.7(b)(2)	Notification of rescheduling	Yes	
§63.7(c)	Quality assurance/test plan	Yes	
§63.7(d)	Testing facilities	Yes	
§63.7(e)(1)	Conditions for conducting performance tests	Yes	

§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes	
§63.7(f)	Alternative test method provisions	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of tests	Yes	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No	
§63.8(b)(1)	Monitoring	Yes	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes	

§63.8(c)(2)-(3)	Monitoring system installation	Yes	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	
§63.8(f)(6)	Alternative to relative accuracy test	Yes	
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification of special compliance requirements for new sources	Yes	

§63.9(e)	Notification of performance test	Yes	
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in previous information	Yes	
§63.10(a)	Administrative provisions for record keeping/reporting	Yes	
§63.10(b)(1)	Record retention	Yes	
§63.10(b)(2)(i)-(v)	Records related to SSM	Yes	
§63.10(b)(2)(vi)-(xi)	Records	Yes	
§63.10(b)(2)(xii)	Record when under waiver	Yes	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.

§63.10(b)(2)(xiv)	Records of supporting documentation	Yes	
§63.10(b)(3)	Records of applicability determination	Yes	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes	
§63.10(d)(2)	Report of performance test results	Yes	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	Yes	
§63.10(e)(1) and (2)(i)	Additional CMS reports	Yes	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/ reporting	Yes	
§63.11	Flares	No	
§63.12	State authority and delegations	Yes	
§63.13	Addresses	Yes	
§63.14	Incorporation by reference	Yes	
§63.15	Availability of information	Yes	

200. [ORC rule 3704.031]
Testing requirements for Refinery Flares

a. The permittee shall conduct, or have conducted, emission testing for the TIU Acid Gas Flare (P001), East Flare (P003), West Flare (P004), and the TRP SRU Acid Gas Flare (P050) in accordance with the following requirements (Note: the one other flare, the SRU #1 Acid Gas Flare (P051), has no testing requirements since it would be an extremely rare event for it to be used.):

i. The emission testing shall be conducted every 2.5 years after the effective date of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the following: no visible emissions, except for 5 minutes during any 2 consecutive hours for the TIU Acid Gas Flare (P001), East Flare (P003), West Flare (P004), and the TRP SRU Acid Gas Flare (P050); the minimum heating value 300 Btu per standard cubic foot of gas being combusted for East Flare (P003) and West Flare (P004); and, the maximum exit velocity requirement of less than 60 feet per second for the East Flare (P003), West Flare (P004), and the TRP SRU Acid Gas Flare (P050).

iii. The following test method(s) shall be employed to demonstrate compliance with the above requirements:

(a) Method 22 of 40 CFR Part 60, Appendix A for visible emissions with an observation period of 2 hours;

(b) OAC rule 3745-21-10(P)(2) for the net heating value of gas combusted; and,

(c) OAC rule 3745-10(P)(3) for the actual exit velocity.

b. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services. However, it should be noted that all the refinery flares are used, at least in part, for control of vapor releases during emergency situations. In fact, flares P001, P049, P050, and P051 are almost exclusively for control of emergency situations. For the two flares that normally operate with a base load of gases, East Flare (P003) and West Flare (P004), the requirement to test at maximum capacity shall be interpreted to relate to only the normal maximum base load, not a worse case emergency scenario. (Situations of large emergency loading may not occur often, or ever, during the permit term, and are not predictable enough to allow test notification, planning and testing.) For the other flares that normally operate with very little or no base load, the visible emissions testing shall be conducted at normal non-emergency base loads. However, heating value and maximum exit velocity demonstrations may make use of calculations and data representative of the quality and quantity of waste gases sent to these flares during emergency situations as an alternative to actually testing during an emergency situation.

c. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

d. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

e. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s).

201. Group 1 Storage Tank Terms and Conditions

a. Additional Terms and Conditions

i. Consistent with U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(Z) [See Part II, section A.4.d] by demonstrating compliance with the storage tank standards in 40 CFR Part 63, Subpart CC [Part II, sections A.63 through A.77]. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the requirements of OAC rule 3745-21-09(Z).

ii. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121 [see Part II, sections A.36 – A.38], except as provided in 63.646(b) through 63.646(l) of Subpart CC [see Part II, section A.68]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

iii. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC [See sections A.63, A.64, A.68] shall constitute a violation of the applicable standard of40 CFR Part 63, Subpart CC.

b. Operational Restrictions

i. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

(a) Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

(b) Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(c) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

ii. The external floating roof shall comply with the following:

(a) [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

(i) Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

(ii) Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

(iii) Except during the inspections required by 40 CFR 63.120(b) [See Part II, section A.37], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

(iv) If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(A) the next time the storage vessel is emptied and degassed; or

(B) no later than 10 years after August 18, 1995.

(b) [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

(i) during the initial fill;

(ii) after the vessel has been completely emptied and degassed; and

(iii) when the vessel is completely emptied before being subsequently refilled.

(c) [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

iii. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

(a) Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

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

iv. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

(a) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.120(b)(4) [See Part II section A.37].

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

c. **Monitoring and/or Record Keeping Requirements**

i. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

(a) [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgment or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

(b) [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

ii. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

(a) [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

(b) [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See Part II section A.37] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See Part II, section A.37].

(c) [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.201.c.iii.(e) and (f)], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.201.c.iii.(e) and (f)] as applicable.

(d) [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

(e) [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

iii. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

(a) [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.201.c.iii.(e)], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

(i) [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC [See Part II, section A.63], whichever occurs last, and at least once every 5 years thereafter.

(ii) [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC [See Part II, section A.63], and at least once per year thereafter.

(iii) [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

(b) [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.201.c.iii.(e)], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

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

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

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

(c) [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

(d) [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements

may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.201.c.iii.(a)].

(e) [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.201.c.iii.(a) and (b)] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.201.b.iii and iv] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

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

(ii) the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

(f) [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See Part II, Section A.37] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.201.c.iii.(a) and (b)] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.201.b.iii and iv], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

iv. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the

slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

v. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

vi. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

d. **Reporting Requirements**

i. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC [See Part II, Sections A.64, A.68, A.76, and A.77], shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

ii. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

(a) [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
Except as provided in 40 CFR 63.120(b)(10)(iii) [See Part II, section A.37], for all the inspections required by 40 CFR 63.120(b)(10) [See Part II, section A.37], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

(b) [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
If the inspection required by 40 CFR 63.120(b)(10) [See section A.201.c.iv and Part II, section A.37] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

(c) [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

iii. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.201.c.iii.(a) and (b)] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

iv. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs. A Periodic Report is not required if none of the compliance exceptions specified in 40 CFR 63.654(g) paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required.

(a) The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.201.c.iii] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.201.c.iii.(c) and (d), A.201.b.iii and iv] are not met. This documentation shall include the following information:

(i) the date of the seal gap measurement;

(ii) the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.201.c.iii.(c) and (d)];

(iii) a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.201.b.iii and iv] that is not met; and

(iv) a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

(b) [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.201.c.iii.(e) and (f)], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.201.c.iii.(e) and (f)], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

(c) [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR 63.120(b)(10) [See Part II, section A.37]. This documentation shall meet the following specifications and requirements.

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

(ii) Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

202. Group 2 Storage Tank Terms and Conditions

a. Additional Terms and Conditions

i. Consistent with U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(L) [See Part II, section A.4.a] by demonstrating compliance with the storage tank standards in 40 CFR Part 63, Subpart CC [Part II,

sections A.63 through A.77]. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the requirements of OAC rule 3745-21-09(L).

ii.. 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.202.c.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.202.d.1.

b. **Operational Restrictions**

i. The permittee shall comply with the standards for storage vessels in 40 CFR Part 63, Subpart CC [see Part II, sections A.63, A.64, A.68, and A.75 through A.77].

c. **Monitoring and/or Record Keeping Requirements**

i. 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 (if required for group determination), the maximum true vapor pressure and average annual true vapor pressure of each stored material (as defined in 40 CFR Part 63.641), in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

ii. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

d. **Reporting Requirements**

i. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

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

B013 - Reformer 1 Regenerator Furnace (PTI 04-01290);
B024 - Asphalt Heater (PTI 04-01290);
B025 - External Asphalt Heater (PTI 04-01290);
F002 - Coke Piles;
P030 - Foul Condensate Stripper #2 (PTI 04-708);
P034 - Stormwater Diversion Chamber (PTI 04-811);
P038 - TRP Amine Treater (PTI 04-1046);
P046 - EPA Wet Gas Treater;
P047 - East Side Amine Treater;
P052 - #1 Foul Condensate Stripper;
T048 - IFR, PR-500392 (PTI 04-875);
T094 - FR, PR-500248;
T095 - FR, PR-500265;
T112 - FR, PR-500880;
T121 - FR, PR-500160 (PTI 04-170);
T135 - FR, PR-500734;
T145 - FR, PR-500022 (PTI 04-708);
T148 - FR, PR-500019 (PTI 04-708);
T149 - FR, PR-500021 (PTI 04-708);
T151 - FR, PR-500020 (PTI 04-708);
T153 - FR, PR-500175 (PTI 04-708);
T154 - FR, PR-500174 (PTI 04-708);
T155 - FR, PR-500172 (PTI 04-708);
T156 - FR, PR-500171 (PTI 04-708);
T157 - FR, PR-500002 (PTI 04-708);
T159 - FR, PR-500001 (PTI 04-708);
T161 - FR, PR-500003 (PTI 04-708);
T163 - IFR, PR-500648 (PTI 04-708);
T165 - FR, PR-511261 (PTI 04-759);
T168 - EFR, PR 500026 (PTI 04-791);
T169 - EFR, PR-500027 (PTI 04-791);
T172 - IFR, PR-500393 (PTI 04-896);
T173 - FR, PR-500407 (PTI 04-924);
Z003 - C4 Vapor Recovery;
Z004 - Propane Truck Loading Rack;
Z010 - Vac Bottom Loading;
Z020 - Drum Cleaning;
Z021 - Parts Cleaning (Instrument Shop (1), Machine Shop (2), Washington Group Shop (1), Pipe/Boiler Shop (1), Vehicle Garage (1));
Z038 - Naphtha Treater (Fugitives);
Z040 - Track 10 Loading;
Z047 - Gasoline Dispensing Facility;
Z053 - Misc. Fired Tank Heaters;
Z060 - DIB Towers;
Z061 - Truck Cleaning;
Z062 - Merox Jet Fuel Treater;
Z063 - Asphalt Plant #1 railcar loading rack; and

Z903 - Asphalt Tank Heaters.

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:

   P901 - Catalyst Loading;
   Z023 - Dupont Dye Tank 161;
   Z048 - Caustic Tanks;
   Z049 - Bleach and Dye Mix Tanks;
   Z050 - Spent Caustic Tanks;
   Z051 - Inorganic Compound Tanks; and
   Z052 - Misc. Tanks.

Emissions Unit ID: **B001**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B001 - H_2 Plant Furnace, 221 mmBtu per hr (PR-2980)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a and A.I.2.b
	OAC rule 3745-31-05(D) (PTI 04-1046 as modified on 8/5/1998)	33.15 pounds per hour nitrogen oxides (NO_x) and 96.80 tons per year NO_x based on a rolling, 12-month summation of the monthly emissions See sections A.I.2.d and A.II.3.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.e.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2.d The emission limitation of 27.84 tons per year SO_2 based on a rolling, 12-month summation of the monthly emissions established pursuant to PTI 04-1046 is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2) in PTI 04-01290.

2.e Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

b. an identification of the emissions unit and the operating parameters that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling, 12-month total NO_x emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system shall allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.

e. Accuracy audit procedures including sampling and analysis methods.
f. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when the $NO_{x.}$ emissions exceed 33.15 lbs/hr and/or 96.80 tons/yr based on a rolling, 12-month summation of the monthly emissions. These reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

3. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.

ii. Identification and location of monitors in the CEMS.

iii. Manufacturer and model number of each monitor in the CEMS.

iv. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

33.15 pounds per hour NO_x

Applicable Compliance Method:

Multiply the actual firing rate in mmBtu/hr by the NO_x emission factor determined during the most recent stack test. A stack test was conducted on this emissions unit on June 17, 1999 which resulted in an emission factor of 0.079 lb NO_x per mmBtu. If required, the permittee shall establish a new NO_x emission factor in units of pounds NO_x per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

96.80 tons per year NO_x based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total NO_x emissions. Add the monthly total NO_x emissions to the total NO_x emissions for the previous 11 months to determine the rolling, 12-month total NO_x emissions.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for NO_x.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

   Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

   Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B003**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B003 - ADHT Stripper Reboiler, 52 mmBtu per hr (PR-2974)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B004**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B004 - Riley Boiler, 332 mmBtu per hr **(**PR-2975)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-14-01(C)	See Part II, sections A.1 and A.2.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall comply with the NOx monitoring, record keeping, and record keeping requirements of OAC rule 3745-14-08 (see Part II of this permit).

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately

assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for

each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
B005 - Reformer 2 Regenerator Heater, 30 mmBtu per hr (PR-2985)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B006**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B006 - Reformer 2 Furnace, 285 mmBtu per hr **(**PR-2987)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-31-05(D) (PTI 04-1046 as modified on 8/5/1998)	42.0 pounds per hour nitrogen oxides (NO_x) and 122.64 tons per year NO_x based on a rolling, 12-month summation of the monthly emissions See section A.II.3.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including

associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

b. an identification of the emissions unit and the operating parameters that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling, 12-month total NO_x emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.

e. Accuracy audit procedures including sampling and analysis methods.
f. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when the $NO_{x.}$ emissions exceed 42.0 lbs/hr and/or 122.64 tons/yr based on a rolling, 12-month summation of the monthly emissions. These reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

3. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

42.0 pounds per hour NO_x

Applicable Compliance Method:

Multiply the actual firing rate in mmBtu/hr by the NO_x emission factor determined during the most recent stack test. A stack test was conducted on this emissions unit on August 18, 1999 which resulted in an emission factor of 0.076 lb NO_x per mmBtu. If required, the permittee shall establish a new NO_x emission factor in units of pounds NO_x per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

122.64 tons per year NO_x based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total NO_x emissions. Add the monthly total NO_x emissions to the total NO_x emissions for the previous 11 months to determine the rolling, 12-month total NO_x emissions.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
B008 - Iso 2 Feed Heaters, 97.4 mmBtu per hr (PR-2994)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a., and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B009**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B009 - Iso 2 Stabilizer Reboiler, 110 mmBtu per hr (PR-2992)	OAC rule 3745-31-02(A)(2) (PTI 04-01290)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(5)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B010**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B010 - Iso 2 Splitter Reboiler, 110 mmBtu per hr (PR-2993)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(5)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B014**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B014 - Reformer 1 Furnace, 248 mmBtu per hr (PR-2962)	OAC rule 3745-31-02(A)(2) (PTI 04-01290)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
B015 - Crude 1 Heater, 280 mmBtu per hr (PR-2954)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B016**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B016 - Coker 1 Furnace, 91 mmBtu per hr (PR-2940)	OAC rule 3745-31-02(A)(2) (PTI 04-01290)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-31-05(D) (PTI 04-1046)	See sections A.II.3 and A.II.4
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. This emissions unit shall be limited to an input capacity of 262,800 mmBtu/yr based on a rolling, 12-month summation of the monthly firing rates.

4. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

   a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

b. an identification of the emissions unit and the operating parameters that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the monthly total firing rate in terms of standard cubic feet and the monthly average heating value of the fuel gas fired. From these data, the permittee shall calculate and record the monthly total firing rate in terms of mmBtu in accordance with the procedures in A.V and shall calculate and record the rolling, 12-month summation of the monthly firing rates in mmBtu per rolling, 12-month period.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of

40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must

revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each month when the rolling, 12-month summation of the monthly firing rate exceeded 262,800 mmBtu. These reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

3. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

    a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.

ii. Identification and location of monitors in the CEMS.

iii. Manufacturer and model number of each monitor in the CEMS.

iv. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

This emissions unit shall be limited to an input capacity of 262,800 mmBtu/yr based on a rolling, 12-month summation of the monthly firing rates.

Applicable Compliance Method:

Multiply the monthly average mmscf of fuel burned by the monthly average Btu content (mmBtu/mmscf) to get the monthly total. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total mmBtu/yr.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B017**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B017 - Coker 2 Furnace, 72 mmBtu per hr (PR-2941)	OAC rule 3745-31-02(A)(2) (PTI 04-01290)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
B018 - FCC Preheat Furnace, 103 mmBtu per hr (PR-2955)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(5)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B019**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B019 - Crude Vac 2 Furnace, 240 mmBtu per hr (PR-2945)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-31-05(D) (PTI 04-1046 as modified on 8/5/1998)	262.8 tons per year nitrogen oxides (NO_x) based on a rolling, 12-month summation of the monthly emissions 21.02 tons per year sulfur dioxide (SO_2) based on a rolling, 12-month summation of the monthly emissions See section A.II.3.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. **Additional Terms and Conditions**

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or

malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to

minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

b. an identification of the emissions unit and the operating parameters that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling, 12-month total NO_x emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

a. Calibration of CEMS.
b. CD determination and adjustment of CEMS.
c. Preventive maintenance of CEMS (including spare parts inventory).
d. Data recording, calculations, and reporting.
e. Accuracy audit procedures including sampling and analysis methods.
f. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records of the monthly average H_2S of the fuel burned in this emissions unit as well as the rolling, 12-month SO2 emissions.

12. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when the $NO_{x.}$ emissions exceed 262.8 tons/yr based on a rolling, 12-month summation of the monthly emissions. The permittee shall submit deviation (excursion) reports that identify each day when the $SO_{2.}$ emissions exceed 21.02 tons/yr based on a rolling, 12-month summation of the monthly emissions.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

3. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately

assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR),

and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.

ii. Identification and location of monitors in the CEMS.

iii. Manufacturer and model number of each monitor in the CEMS.

iv. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

5. Unless otherwise specified above, the reports required to be submitted under A.IV shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

262.8 tons per year NO_x based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

If required, the permittee shall establish a new NO_x emission factor in units of pounds NO_x per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA. Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total NO_x emissions. Add the monthly total NO_x emissions to the total NO_x emissions for the previous 11 months to determine the rolling, 12-month total NO_x emissions.

e. Emission Limitation:

21.02 tons per year SO_2 based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the monthly average net H_2S concentration by the monthly total gas flow to determine the lbs H_2S per month. Convert H_2S to SO_2 at a rate of 34 pounds H_2S to 64 pounds SO_2 emissions. Add the monthly total to the total for the previous 11 calendar months to determine the rolling, 12-month total SO_2 emissions.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months prior to permit expiration.

b. The emission testing shall be conducted to establish a new NO_x emission factor in units of pounds NO_x per million Btu of actual heat input for nitrogen oxides.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 3A, 7E and 19 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and

the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

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: **B020**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B020 - Power Boiler, 291 mmBtu per hr (PR-2967)	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/1990)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-14-01(C)(1)	See Part II, sections A.1 and A.2.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(5)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall comply with the NOx monitoring, recordkeeping, and record keepingrequirements of OAC rule 3745-14-08 (see Part II of this permit).

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately

assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of

this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B022**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B022 - Naptha Treater Heater, 72 mmBtu per hr (PR-2958)	OAC rule 3745-31-02(A)(2) (PTI 04-01290)	See sections A.I.2.a. and A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(W)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.b This emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

The H_2S emission limitation required in section A.I.2.a, pursuant to OAC rule 3745-31-02(A)(2), is equivalent to the H_2S emission limitation specified in 40 CFR Part 60, Subpart J. See sections A.III and A.IV for the applicable monitoring, record keeping, and reporting requirements.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established in PTI 04-01290 pursuant to OAC rule 3745-31-02(A)(2).

2.d Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or

integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic

foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B029**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B029 - 22.8 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (ADHT Furnace)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	See section A.I.2.a.
	OAC rule 3745-18-54(W)(1)	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-708 as modified on 8/5/1998)	1.45 pounds per hour and 6.35 tons per year carbon monoxide (CO)
		1.60 pounds per hour and 6.99 tons per year nitrogen oxides (NO_x)
		0.15 pound per hour and 0.64 ton per year particulate emissions
		2.53 tons sulfur dioxide (SO_2) per year
		0.07 pound per hour and 0.29 ton per year volatile organic compounds (VOC)
		See section A.I.2.b.
	OAC rule 3745-21-08(B)	See section A.I.2.c.
	40 CFR Part 60, Subpart J	See section A.I.2.d.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.e.

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-708.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

2.e Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic

meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B

during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess

emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

c. Emission Limitation:

1.45 pounds per hour CO

Applicable Compliance Method:

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

d. Emission Limitation:

6.35 tons per year CO

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

e. Emission Limitation:

0.15 pound per hour particulate emissions

Applicable Compliance Method:

If required, multiply the AP-42 emission factor of 0.3 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

f. Emission Limitation:

0.64 ton per year particulate emissions

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

g. Emission Limitation:

1.60 pounds per hour NO_x

Applicable Compliance Method:

Multiply the BP NO_x emission factor of 0.07 lb/mmBtu by the hourly fuel gas burned to determine the hourly NO_x emissions. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

h. Emission Limitation:

6.99 tons per year NO_x

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly NO_x limit constitutes compliance with the annual limit.

i. Emission Limitation:

0.07 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 2.78 lb/mmcf of fuel gas burned corrected for heating value by the actual amount of fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

j. Emission Limitation:

0.29 ton per year VOC

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with the hourly VOC emissions limit constitutes compliance with the annual limit.

k. Emission Limitation:

2.53 tons per year SO_2

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with A.V.1.b constitutes compliance with the annual SO_2 limit.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing

the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B030**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B030 - 57.6 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (BGOT Furnace)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	See section A.I.2.a
	OAC rule 3745-18-54(W)(1)	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-708)	3.66 pounds per hour and 16.06 tons per year carbon monoxide (CO)
		4.03 pounds per hour and 17.66 tons per year nitrogen oxides (NO_x)
		0.3 pound per hour and 1.31 tons per year particulate emissions
		6.39 tons sulfur dioxide (SO_2) per year
		0.17 pound per hour and 0.74 ton per year volatile organic compounds (VOC)
		See section A.I.2.b.
	OAC rule 3745-21-08(B)	See section A.I.2.c.
	40 CFR Part 60, Subpart J	See section A.I.2.d.
	40 CFR Part 63, Subpart DDDDD	See section A.I.2.e.

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-708.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

2.e Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic

meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B

during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess

emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

c. Emission Limitation:

3.66 pounds per hour CO

Applicable Compliance Method:

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

d. Emission Limitation:

16.06 tons per year CO

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

e. Emission Limitation:

0.3 pound per hour particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor of 0.3 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

f. Emission Limitation:

1.31 tons per year particulate emissions

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

g. Emission Limitation:

4.03 pounds per hour NO_x

Applicable Compliance Method:

Multiply the BP NO_x emission factor of 0.07 lb/mmBtu by the hourly fuel gas burned to determine the hourly NO_x emissions. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

h. Emission Limitation:

17.66 tons per year NO_x

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly NO_x limit constitutes compliance with the annual limit.

i. Emission Limitation:

0.17 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 2.78 lb/mmcf of fuel gas burned corrected for heating value by the actual amount of fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

j. Emission Limitation:

0.74 ton per year VOC

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with the hourly VOC emissions limit constitutes compliance with the annual limit.

k. Emission Limitation:

6.39 tons per year SO_2

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with A.V.1.b constitutes compliance with the annual SO_2 limit.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing

the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B031**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B031 - 130 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (Vac 1 Furnace)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	See section A.I.2.a
	OAC rule 3745-18-54(W)(1)	See section A.I.2.a.
	OAC rule 3745-23-06(B)	See section A.I.2.d.
	OAC rule 3745-31-05(A)(3) (PTI 04-959 as issued on 10/18/1995)	40 pounds per million standard cubic feet of fuel gas burned and 4.2 pounds per hour of carbon monoxide (CO) 0.07 pound per million Btu of actual heat input and 9.1 pounds per hour of nitrogen oxides (NO_x) 2.5 pounds per million standard cubic feet of fuel gas burned and 0.3 pound per hour of particulate emissions 2.8 pounds per hour of sulfur dioxide (SO_2) 1.7 pounds per million standard cubic feet of fuel gas burned and 0.2 pound per hour of organic compounds (OC) See section A.I.2.b.

OAC rule 3745-21-08(B)	See section A.I.2.e.
40 CFR Part 60, Subpart J	See section A.I.2.c.
40 CFR Part 63, Subpart DDDDD	See section A.I.2.f.

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-959.

2.e The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-959.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.f Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for

Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

   b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

   a. Permittee name and address.

   b. Identification and location of monitors in the CEMS.

   c. Manufacturer and model number of each monitor in the CEMS.

   d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

   e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

c. Emission Limitation:

40 lbs CO/mmscf fuel gas burned

Applicable Compliance Method:

This emission factor was obtained from AP-42. The operational restriction of A.II.1 shall serve as a demonstration of compliance with this limit. If required, the permittee shall demonstrate compliance using Method 10 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

d. Emission Limitation:

4.2 pounds per hour CO

Applicable Compliance Method

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

0.3 pound per hour particulate emissions

Applicable Compliance Method:

If required, multiply the AP-42 emission factor of 1.9 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

f. Emission Limitation:

2.5 pounds particulate emissions per mmcf of fuel gas burned

Applicable Compliance Method:

Compliance with the operational restriction of A.II.1 shall serve as demonstration of compliance with this limit. If required, the permittee shall demonstrate compliance using Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

g. Emission Limitation:

9.1 pounds per hour NO_x

Applicable Compliance Method:

Multiply the BP NO_x emission factor of 0.07 lb/mmBtu by the hourly fuel gas burned to determine the hourly NO_x emissions. If required, compliance shall be demonstrated according to Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

h. Emission Limitation:

0.07 lb NO_x per mmBtu of actual heat input

Applicable Compliance Method:

If required, compliance shall be demonstrated according to Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

i. Emission Limitation:

0.2 pound per hour OC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 2.78 lb/mmcf of fuel gas burned corrected for heating value by the actual amount of fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

j. Emission Limitation:

1.7 pounds OC per mmcf of fuel gas burned

Applicable Compliance Method:

Compliance with the operational restriction of A.II.1 shall serve as demonstration of compliance with this limit. If required, the permittee shall demonstrate compliance using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

k. Emission Limitation:

2.8 pounds per hour of SO_2

Applicable Compliance Method:

The hourly limit was calculated based on operation at maximum capacity burning fuel gas with a maximum hydrogen sulfide content of 0.10 gr/dscf. Compliance A.V.1.b constitutes compliance with the hourly SO_2 limit. If required, compliance shall be demonstrated according to Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B032**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B032 - 230 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (Coker 3 Furnace)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
	OAC rule 3745-17-10(B)	See section A.I.2.a.
	OAC rule 3745-18-54(W)(1)	See section A.I.2.a.
	OAC rule 3745-23-06(B)	See section A.I.2.d.
	OAC rule 3745-31-05(A)(3) (PTI 04-1046 as issued on 8/5/1998)	13.8 pounds per hour and 40.3 tons per rolling, 12-month period of carbon monoxide (CO) 24.15 pounds per hour and 70.52 tons per rolling, 12-month period of nitrogen oxides (NO_x) 1.04 pounds per hour and 3.02 tons per rolling, 12-month period of particulate emissions 20.46 tons per rolling, 12-month period of sulfur dioxide (SO_2) 0.59 pound per hour and 1.71 tons per rolling, 12-month period of volatile organic compounds (VOC) See section A.I.2.b.

OAC rule 3745-21-08(B)	See section A.I.2.e
40 CFR Part 60, Subpart J	See section A.I.2.c.
40 CFR Part 63, Subpart DDDDD	See section A.I.2.f.

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J..

2.c The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-1046.

2.e The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-1046.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio

2.f Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.121 through A.149, for the requirements of 40 CFR Part 63, Subpart DDDDD; - National Emission Standards for Hazardous Air Pollutants for

Industrial, Commercial, and Institutional Boilers and Process Heaters. The requirements of 40 CFR Part 63, Subpart DDDDD will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of

40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must

revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

10. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling12-month total CO, NO_x, PE, and VOC emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify each day when the CO, NO_x, PE, and/or VOC pound per hour and/or rolling, 12-month emission limitations specified under A.I.1. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

3. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

c. Emission Limitation:

20.46 tons per rolling, 12-month period of SO_2

Applicable Compliance Method

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year burning fuel gas with a maximum H_2S concentration of 0.10 gr/dscf. Compliance with the hourly H_2S limit constitutes compliance with the annual SO_2 limit.

d. Emission Limitation:

13.8 pounds per hour CO

Applicable Compliance Method

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 10 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

e. Emission Limitation:

40.3 tons per rolling, 12-month period CO

Applicable Compliance Method:

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per month times the fuel gas heating value correction factor and divide by 2000 pounds per ton. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

f. Emission Limitation:

1.04 pound per hour particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.9 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

g. Emission Limitation:

3.02 tons per rolling, 12-month period of particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.9 lb/mmcf of fuel gas burned times the total fuel gas burned per month times the fuel gas heating value correction factor divided by 2000 pounds per ton. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly particulate emission limit constitutes compliance with the annual particulate emission limit.

h. Emission Limitation:

24.15 pounds per hour NO_x

Applicable Compliance Method:

Multiply the BP NO_x emission factor of 0.065 lb/mmBtu by the hourly fuel gas burned to determine the hourly NO_x emissions. The NO_x emission factor was developed through testing on this emissions unit using Method 7E of 40 CFR Part 60, Appendix A on August 17, 1999. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 7E of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

i. Emission Limitation:

70.52 tons NO_x per rolling, 12-month period

Applicable Compliance Method:

Multiply the BP NO_x emission factor of 0.065 lb/mmBtu by the monthly total fuel gas burned divided by 2000 pounds per ton to determine the total monthly NO_x emissions. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly NO_x limit constitutes compliance with the annual NO_x limit.

j. Emission Limitation:

0.59 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.7 lb/mmcf of fuel gas burned corrected for heating value by the hourly fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

k. Emission Limitation:

1.71 tons per rolling, 12-month period VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.7 lb/mmcf of fuel gas burned corrected for heating value by the monthly amount of fuel gas burned divided by 2000 pounds per ton. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with the hourly VOC emissions limit constitutes compliance with the annual limit.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for NO_X.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing

the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **F001**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F001 - paved roadways and parking areas (see Section A.I.2.a)	OAC rule 3745-17-07(B)(4)	no visible particulate emissions except for 6 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(8), (B)(9)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.c, A.I.2.d, and A.I.2.f through A.I.2.j)
unpaved roadways and parking areas (see Section A.I.2.b)	OAC rule 3745-17-07(B)(5)	no visible particulate emissions except for 13 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(2)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.e through A.I.2.j)

2. Additional Terms and Conditions

2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways:

Separator Service Road
North 40th Avenue
Gate 10 Entrance Road

North Tank Field Service Roads
Butane Alley (Limited Access)
SRU Area Service Roads
West Tank Field Service Roads
West 40th Street
25th Avenue
Process Units Access Roads
West 25th Street
South 40th Avenue
East Tank Field Service Roads
East 25th Avenue
20th Street
Employee Entrance Road

paved parking areas:

Scaletech Parking Lot
Sat 7 Parking Lot
Nerve Center / Molnar Building Parking Lot
Asphalt Plant Parking / Loading Area
Gate 27 / Contractor Parking Lot
Employee Parking Lots
Visitor Parking Lot

2.b The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

unpaved roadways:

Propane Truck Loading Entrance Road
Separator Area Auxiliary Road
South Pond / Impoundment Tanks Service Roads
North Tank Field Auxiliary Roads
West Tank Field Auxiliary Roads
Tank 19/20/21/22 Service Road
East Tank Field Auxiliary Roads
Process Unit Alleys (Limited Access)
East Cooling Towers Service Road
Tank 14/15 Service Road
Alky 1 Tank Farm Service Road
Tank 106 Service Road

unpaved parking areas:

Contractor Parking Lot (Limited Access)

Contractor Shutdown Parking Lot (Limited Access)
Gate 23B / C&W Parking Lot

2.c The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's Title V permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.d The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to pave the unpaved shoulders of all paved roadways at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional control measures to ensure compliance.

2.e The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to paving the unpaved roadways and parking areas as needed to ensure compliance, based on observations performed in accordance with the requirements in section A.III. Nothing in this paragraph shall prohibit the permittee from employing additional control measures to ensure compliance.

2.f The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2.g Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

2.h The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.i Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

2.j Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform visual inspections of the roadways and parking areas in accordance with the following frequencies:

paved roadways and parking areas	minimum inspection frequency
Separator Service Road	weekly
Scaletech Parking Lot	weekly
North 40th Avenue	weekly
Gate 10 Entrance Road	weekly
North Tank Field Service Roads	weekly
Butane Alley (Limited Access)	weekly
SRU Area Service Roads	weekly
West Tank Field Service Roads	weekly
West 40th Street	weekly
25th Avenue	weekly
Process Units Access Roads	weekly
Sat 7 Parking Lot	weekly
Nerve Center / Molnar Building Parking Lot	weekly
West 25th Street	weekly
South 40th Avenue	weekly
East Tank Field Service Roads	weekly
Asphalt Plant Parking / Loading Area	weekly
East 25th Avenue	weekly
20th Street	weekly
Gate 27 / Contractor Parking Lot	weekly

Employee Parking Lots	weekly
Employee Entrance Road	weekly
Visitor Parking Lot	weekly

unpaved roadways and parking areas	minimum inspection frequency
Separator Area Auxiliary Road	daily on weekdays
South Pond / Impoundment Tanks Service Roads	daily on weekdays
North Tank Field Auxiliary Roads	daily on weekdays
West Tank Field Auxiliary Roads	daily on weekdays
Tank 19/20/21/22 Service Road	daily on weekdays
East Tank Field Auxiliary Roads	daily on weekdays
Gate 23B / C&W Parking Lot	daily on weekdays
East Cooling Towers Service Road	daily on weekdays
Tank 14/15 Service Road	daily on weekdays
Alky 1 Tank Farm Service Road	daily on weekdays
Tank 106 Service Road	daily on weekdays
Contractor Parking Lot	daily on weekdays
Process Unit Alleys (Limited Access)	daily on weekdays (when in use)
Propane Truck Loading Entrance Road (Limited Access)	daily on weekdays (when in use)
Shutdown Contractor Parking Lot (Limited Access)	daily on weekdays (when in use)

NOTE: Weekday monitoring excludes weekends and holidays.

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in section A.III.4.d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

   b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. If required, compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **F004**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F004 - Coke crusher	OAC rule 3745-17-07(B)(1)	20% opacity as a 3-minute average
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.I.b through A.I.2.d

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Coke crushing

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's Title V permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)	control measure(s)
Coke crushing	watering

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that

the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform visual inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
Coke crushing	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):

   c. the dates the control measure(s) was (were) implemented; and

   d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

   The information in section A.III.3.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency; and

   b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **F005**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F005 - Coke handling	OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on 8/5/1998)	5.02 tons per year particulate emissions as a rolling, 12-month summation best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.b through A.I.2.d) The permittee shall maintain a partial enclosure on the coke pit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B)(1) and 3745-17-08(B).
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See sections A.I.2.a through A.I.2.d.

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Coke pit, front-end loader

2.b The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-

mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)	control measure(s)
Coke pit, front-end loader	watering

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform visual inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
Coke crushing	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in section A.III.3.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall maintain monthly records of the amount of coke handled. From this data, the permittee shall calculate and record the total particulate emissions for that month and the rolling, 12-month summation of the monthly emissions in accordance with the procedures specified in section V.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

c. each month that the rolling, 12-month summation of total particulate emissions recorded under A.III.5 is in excess of the limit established under section A.I.1.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

b. Emission Limitation:

5.02 tons per year particulate emissions as a rolling, 12-month summation

Applicable Compliance Method:

AP-42 calculation using sections 13.2.4 and 13.2.5 dated January, 1995 and the monitoring and record keeping requirements of section A.III.5. Add the monthly total emissions to the total emissions for the previous 11 months to determine the rolling, 12-month summation of particulate emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **F006**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F006 - Coke Crusher #2	OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on 8/5/1998)	1.86 tons per year particulate emissions as a rolling, 12-month summation The permittee shall maintain a partial enclosure on this emissions unit. See section A.I.2.e.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See sections A.I.2.b through A.I.2.d.

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Coke crushing

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)	control measure(s)
Coke crushing	Maintaining sufficient moisture content in coke

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

2.e The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B)(1) and OAC rule 3745-17-08(B).

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform visual inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
Coke crushing	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):

   c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in section A.III.3.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall maintain monthly records of the amount of coke crushed. From this data, the permittee shall calculate and record the total particulate emissions for that month and the rolling, 12-month summation of the monthly emissions in accordance with the procedures specified in section V.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency; and

   b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

   c. each month that the rolling, 12-month summation of particulate emissions recorded under A.III.5 is in excess of the limits established under section A.I.1.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   20% opacity as a 3-minute average for fugitive emissions

   Applicable Compliance Method:

   If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”), as such Appendix

existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

b. Emission Limitation:

1.86 tons per year particulate emissions as a rolling, 12-month summation

Applicable Compliance Method:

Emission calculation using the emission factor of 0.02 pound particulate emissions per ton of coke crushed from the Ohio EPA document *Reasonably Available Control Measures for Fugitive Dust Sources* Table 2.19-2 dated August, 1983 and the monitoring and record keeping requirements of A.III.5. Add the monthly total emissions to the total emissions for the previous 11 months to determine the rolling, 12-month summation of particulate emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **J001**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
J001 - 20,000 gallon per day railcar loading rack for aviation gasoline at a bulk terminal.	40 CFR Part 63, Subpart R	See section A.I.2.a.
	OAC rule 3745-21-09(Q)	See section A.I.2.a.
	40 CFR Part 60, Subpart XX	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-401 as issued on 6/3/1987)	6.60 tons of volatile organic compounds (VOC) per year See section A.II.
	OAC rule 3745-21-09(T)	See section A.I.2.b.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c through A.I.2.e.

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 63, Subpart R, OAC rule 3745-21-09(Q), and 40 CFR Part 60, Subpart XX, this emissions unit is exempt from the requirements of these regulations because the throughput capacity is equal to, or less than, 20,000 gallons (75,700 liters) per day.

2.b Refer to Part II, section A.4.c, of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77, specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22, of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Under 40 CFR Part 63, Subpart CC, this emissions unit is considered a Group 2 gasoline loading rack, since it processes less than 20,000 gallons per day.

II. Operational Restrictions

1. The maximum throughput of gasoline for this emissions unit shall not exceed 20,000 gallons (75, 700 liters) per day.

2. The gasoline supplied to this emissions unit shall come only from stationary storage tanks equipped with internal or external floating roofs.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain daily records of the following information:

   a. the types of petroleum liquids loaded in this emissions unit;

   b. the gasoline throughput; and

   c. the maximum pressure (in pounds per square inch absolute) and the molecular weight of vapors of each liquid loaded in this emissions unit.

2. The permittee shall maintain a record of the annual throughput of all petroleum liquids loaded in this emissions unit.

IV. Reporting Requirements

1. If the daily records document a daily throughput greater than 20,000 gallons of gasoline, the permittee shall so notify the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitation and operational restriction of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      6.60 tons of VOC per year

      Applicable Compliance Method:

Compliance shall be demonstrated through the monitoring and record keeping requirements of section A.III using formula (1) of the 1/95 AP-42 Section 5.2:

L = [12.46 * S * P * M] / T for each liquid loaded

where:

L = the loading loss in pounds of VOC per thousand gallons loaded;
S = saturation factor (0.60 for submerged loading);
P = true vapor pressure of the liquid loaded (in psia);
M = molecular weight of vapors (in lb/lb-mole); and
T = temperature of bulk liquid loaded (520°R may be assumed as a year round average).

When more than one type of petroleum liquid is loaded, the loading loss from each type of liquid shall be calculated. The total loading loss shall be the sum of the loading losses for each type of liquid loaded.

Alternative U.S. EPA-approved methods may be used with prior approval from the Ohio EPA.

b. Operational Restriction:

The maximum throughput of gasoline for this emissions unit shall not exceed 20,000 gallons (75, 700 liters) per day.

Applicable Compliance Method:

Compliance with the throughput limitation in section A.II.1 shall be determined in accordance with the monitoring and record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **J004**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
J004 - Marine vessel loading operation.	40 CFR Part 63, Subpart Y	See section A.I.2.b.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, section A.63.
	OAC rule 3745-21-09(T)	See section A.I.2.c.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of 40 CFR Part 63, Subpart CC, in accordance with 40 CFR 63.640(c)(6), because the emissions unit does not meet the applicability criteria of 40 CFR Part 63, Subpart Y.

2.b In accordance with 40 CFR Part 63, Subpart Y, this emissions unit is exempt from the requirements of this regulation, because the potential to emit of each individual hazardous air pollutant (HAP) is less than 10 tons per year, and the potential to emit of all HAPs combined is less than 25 tons per year.

2.c Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

II. Operational Restrictions

1. The potential to emit of each individual HAP for this emissions unit shall be less than 10 tons per year (9.1 Mg) and shall be calculated annually.

2. The potential to emit of all HAPs combined for this emissions unit shall be less than 25 tons per year (22.7 Mg) and shall be calculated annually.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall retain records of the potential to emit estimates determined in 40 CFR 63.565(l), i.e., emission estimation procedures and records of their actual throughputs by commodity for 5 years.

IV. Reporting Requirements

1. If the annual records indicate that potential HAP emissions are equal to or greater than the emission limitation(s), the permittee shall notify the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the estimate of potential HAP emissions limitation(s) in sections A.II.1 and A.II.2 shall be determined in accordance with the monitoring and record keeping requirements of section A.III.1 from any loading operations of commodities with vapor pressures greater than, or equal to, 10.3 kilopascals (1.5 psia) at standard conditions, 20 degrees Celsius and 760 millimeters of mercury. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurements or estimating techniques generally accepted in industry practice for operating conditions at the source.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **J005**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
J005 - Asphalt loading rack	OAC rule 3745-21-09(T)	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1044 as issued on 1/29/1997)	0.123 lb of volatile organic compounds (VOC) per 1000 gallons loaded
	OAC rule 3745-31-05(D) (PTI 04-1044 as issued on 1/29/1997)	3.2 tons/year of VOC per rolling, 12-month period
	40 CFR Part 60, Subpart GGG	See section A.I.2.b.
	40 CFR Part 63, Subpart LLLLL	Exempt, see section A.I.2.c.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

2.b Refer to Part II, sections A.23 through A.25 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart GGG.

2.c This emissions unit does not meet the definition of asphalt processing facility as defined under 40 CFR 63.8698. This loading rack is not used for oxidized asphalt.

2.d Emissions from non-gasoline loading racks are not subject to 40 CFR Part 63, Subpart CC.

2.e Asphalt loading racks are not considered an affected facility under 40 CFR Part 63, Subpart EEEE (Organic Liquid Distribution).

II. Operational Restrictions

1. The maximum annual throughput for the asphalt loading rack J005 shall not exceed 51,240,000 gallons, based upon a rolling, 12 month summation of the gallons of the asphalt loaded.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the loading rate for each month; and

   b. the rolling, 12-month summation of the loading rates.

IV. Reporting Requirements

1. The permittee shall submit semi-annual deviation (excursion) reports that identify all exceedances of the rolling, 12-month loading rate limitation.

V. Testing Requirements

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

   a. Emission Limitation:

      0.123 pound of VOC per thousand gallons of asphalt loaded

      Applicable Compliance Method:

      Calculate the loading loss by use of the following equation from AP-42 5th Edition, January, 1995, Chapter 5.2

      $L = [12.46 * S * P * M] / T$

      where:

      L = the loading loss in pounds of VOC per thousand gallons loaded;
      S = saturation factor = 1.45 for splash loading tank trucks;
      P = true vapor pressure of liquid loaded (psia) = 0.028 (for asphalt at 320 degrees F);
      M = molecular weight of vapors (lb/lbmole) = 190 (assuming residual no. 6 oil); and

T = temperature of bulk liquid loaded, degrees R = 780.

b. Emission Limitation:

3.2 tons/year of VOC per rolling, 12-month period

Applicable Compliance Method:

Multiply the VOC loading loss emission factor of 0.123 lb/1000 gallons of asphalt loaded by the actual asphalt loading rate per rolling, 12-month period**.** The loading loss emission factor was obtained by the equation specified in section A.V.1.a above.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **J006**

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
J006 - Specialty fuels loading rack with a maximum daily throughput less than 20,000 gallons per day	40 CFR Part 63, Subpart R	See section A.I.2.a.
	OAC rule 3745-21-09(Q)	See sections A.I.2.a and A.II.
	OAC rule 3745-21-09(T)	See section A.I.2.b.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c through A.I.2.e.
	40 CFR Part 60, Subpart XX	See section A.I.2.f

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 63, Subpart R and OAC rule 3745-21-09(Q), this source is exempt from the requirements of these regulations because the throughput capacity is equal to, or less than, 20,000 gallons (75,700 liters) per day.

2.b Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Under 40 CFR Part 63, Subpart CC, this emissions unit is considered a Group 2 gasoline loading rack, since it processes less than 20,000 gallons per day.

2.f This rule is not applicable due to the emissions unit being installed prior to December 17, 1980.

II. Operational Restrictions

1. The maximum throughput of gasoline for this emissions unit shall not exceed 20,000 gallons (75, 700 liters) per day.

2. The gasoline supplied to this emissions unit shall come only from stationary storage tanks equipped with internal or external floating roofs.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the gasoline throughput.

IV. Reporting Requirements

1. If the daily records document a daily throughput greater than 20,000 gallons of gasoline, the permittee shall so notify the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the throughput limitation in section A.II.1 of these terms and conditions shall be determined in accordance with the monitoring and record keeping requirements of section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P007**

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
P007 - Fluidized Catalytic Cracking Unit (FCCU) consisting of an FCC Reactor, catalyst regenerator, fractionator, strippers and absorbers with an average processing capacity of 55,000 barrels per day of fresh feed; and a carbon monoxide (CO) Boiler with a maximum input capacity of 669 million Btu per hour	OAC rule 3745-31-05(A)(3) (PTI 04-01330 as issued on August 28, 2003)	See section A.I.2.l
	OAC rule 3745-31-02(A)(2) (PTI 04-01330 as issued on August 28, 2003)	See sections A.I.2.c through A.I.2.f and A.I.2.k.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
All fugitive emissions from the FCCU and CO boiler are included with this emissions unit.	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of actual heat input from fuel burned in the CO boiler See section A.I.2.h.
	OAC rule 3745-17-11(A)	91.7 pounds per hour particulate emissions See section A.I.2.b. and A.I.2.j.
	OAC rule 3745-18-54(W)(6)	0.92 pound of sulfur dioxide (SO_2) per one thousand pounds of fresh feed See section A.I.2.b. and A.I.2.i.

	OAC rule 3745-21-09(T)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
equipment leaks	40 CFR Part 60, Subpart GGG	See section A.I.2.m and Part II, sections A.23 through A.25.
catalytic cracking unit	40 CFR Part 63 , Subpart UUU	See section A.I.2.g and Part II, sections A.78 through A.98.

2. Additional Terms and Conditions

2.a The permittee shall comply with all applicable equipment leak terms and conditions referencing 40 CFR Part 60, Subpart VV in Part II, sections A.6 through A.22 and OAC rule 3745-21-09(T) in Part II, section A.4.c of this permit.

2.b This emission limit applies to emissions from the FCCU.

2.c The permittee shall limit CO emissions from the FCCU to 500 parts per million by volume dry basis (ppmvd) as a 1-hour average. The CO limit shall not apply during periods of startup, shutdown or malfunction of the FCCU or the CO control equipment, if any, provided that during startup, shutdown or malfunction BP shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the USEPA and the Toledo Division of Environmental Services which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the emissions unit.

2.d The permittee shall reduce total particulate emissions at the FCCU to 1 pound per 1,000 pounds of coke burned. The permittee shall achieve these reductions through installation of an electrostatic precipitator. The permittee shall meet this limit by no later than 6 months after the planned 2007 shutdown.

2.e The permittee shall not burn in the CO Boiler any refinery fuel gas that has a volume-weighted, rolling, 3-hour average hydrogen sulfide (H_2S) concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.f The CO Boiler (not the FCCU) shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices. These requirements apply to the CO Boiler at all times when burning refinery fuel gas.

2.g The permittee shall comply with the requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II of this permit] by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR 63.1563(c).

2.h This emission limitation applies to the CO Boiler.

2.i The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2.j The emission limitation specified by this rule will be less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2) 6 months after the planned shutdown of this emissions unit in 2007 (See Section A.I.2.d).

2.k SO_2 emissions from the FCCU shall not exceed 351 ppmvd at 0% oxygen as a rolling 7-day average or 190 ppmvd at 0% oxygen as a 365-day rolling average. This emission limit was proposed by the permittee and is based on a 12-month demonstration of SO_2 adsorbing catalyst. If U.S. EPA sets a lower emission limitation after completing their analysis of the data obtained during the 12-month SO_2 adsorbing catalyst demonstration, the permittee shall submit a permit to install application requesting a revision to the SO_2 emission limit(s) in this paragraph.

2.l Ammonia emissions shall not exceed 20 parts per million by volume dry basis or 41.61 tons per year.

Along with the 6-month demonstration period of the SNCR system , the permittee shall include an analysis of the permittee's ability to minimize ammonia slip while maintaining the SNCR system effectiveness. The results of this analysis shall be submitted to the Toledo Division of Environmental Services . Based on the ammonia slip analysis, the permittee shall minimize ammonia slip while maintaining SNCR effectiveness in a manner consistent with good engineering practices. These emission limitations are the potential to emit based on vendor's design data, therefore, monitoring, record keepingand reporting are not required.

2.m Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The permittee shall only burn FCCU regenerator offgas, natural gas, and/or refinery fuel gas in the CO Boiler.

III. Monitoring and/or Record Keeping Requirements

1. Continuous Opacity Monitoring Requirements

   a. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 51, Appendix P.

   b. The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (1-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

   c. Continuous Opacity Monitoring - Certified Systems Statement of Certification

      A statement of certification of the existing continuous Opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Toledo Division of Environmental Services upon request.

2. Continuous SO_2 Emissions Monitoring Requirements

   The permittee shall operate and maintain existing equipment to continuously monitor and record SO_2 emissions from the FCCU in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

3. Continuous H_2S Monitoring and Record Keeping Requirements

   a. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in the CO Boiler. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

      i. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

      ii. The span value for this instrument is 425 mg/dscm H_2S.

iii. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

iv. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. Common Monitoring and Record Keeping Requirements for SO_2 and H_2S continuous emissions monitoring systems

a. The permittee shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts of the H_2S monitor at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system shall allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

b. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) shall be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

c. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

d. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

e. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of

the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

f. The permittee shall implement a quality control program for the H_2S and SO_2 continuous emissions monitoring systems. As a minimum, each quality control program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

i. calibration of CEMS;
ii. CD determination and adjustment of CEMS;
iii. preventive maintenance of CEMS (including spare parts inventory);
iv. data recording, calculations, and reporting;
v. accuracy audit procedures including sampling and analysis methods; and
vi. program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the permittee shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

g. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

5. FCC/CO Boiler Monitoring and Record Keeping Requirements

a. For each day during which the permittee burns a fuel other than FCCU regenerator offgas, refinery fuel gas, or natural gas in the CO Boiler, the permittee shall maintain a record of the type and quantity of fuel burned.

b. The permittee shall measure and record hourly average CO concentrations from the FCCU. Process analyzers calibrated in accordance with manufacturer's recommendations may be used for this purpose.

c. The permittee shall maintain a record of the operating time of the FCCU, the CO Boiler, and a record of all periods when the emissions from the FCCU bypass the CO Boiler.

6. Except as otherwise specified in this section, all records required under Section A.III of this permit shall be maintained in accordance with the Monitoring and Related Record Keeping Requirements of Part I - General Terms and Conditions.

IV. Reporting Requirements

1. Continuous Opacity Monitoring Requirements

Pursuant to 40 CFR Part 51, Appendix P, Paragraph 4.0, the permittee shall submit reports on a quarterly basis to the Toledo Division of Environmental Services documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. Reporting Requirements for SO_2 Continuous Emissions Monitoring System

a. The permittee shall submit a SO_2 excess emissions and monitoring systems performance report and/or a summary report form (see paragraph (d) of 40 CFR 60.7) to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each period in which emissions of SO_2 exceed 351 ppmvd at 0% oxygen as a rolling 7-day average and/or 190 ppmvd at 0% oxygen as a 365-day rolling average. Written reports of excess emissions shall include the following information:

i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The SO_2 excess emissions summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. The data assessment report described under 40 CFR Part 60 Appendix F, Procedure 1 shall also be submitted with the summary report form.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

3. Reporting Requirements for H_2S Continuous Emissions Monitoring System

a. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

i. the magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement

and completion of each time period of excess emissions. The process operating time during the reporting period;

ii. specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

iii. the date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

iv. when no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The H_2S excess emissions summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. Common Reporting Requirements for Continuous H_2S and SO_2 Continuous Emissions Monitoring Systems

a. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60 Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions. As a minimum, the DAR shall contain the following information:

i. permittee name and address;

ii. identification and location of monitors in the CEMS;

iii. manufacturer and model number of each monitor in the CEMS;

iv. assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications;

v. results from EPA performance audit samples described in Section 5 and the applicable RM's; and

vi. summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 or 40 CFR Part 60 Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60 Appendix F, Procedure 1.

5. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than FCCU regenerator offgas, refinery fuel gas, or natural gas was burned in the CO Boiler. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

6. Reporting Requirements for Carbon Monoxide Emissions Monitoring System

The permittee shall submit semiannual deviation (excursion) reports that identify each period when the CO emissions from the FCCU exceeded 500 ppmvd as a one-hour average. Written deviation reports shall include the following information:

a. the total operating time of the emissions unit during the reporting period;

b. information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken;

c. information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks); and

d. if there are no deviations from the emission limitation and there was no monitor downtime, a statement that there were no deviations from the emission limitation and that the CO monitoring system was not inoperative, inactive, malfunctioning, out-of-control, repaired or adjusted.

These reports shall be submitted to the Toledo Division of Environmental Services by January 30 and July 30 of each year and shall cover the previous six calendar months.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

20 percent opacity as a six-minute average

Applicable Compliance Method:

If required, Method 9 of 40 CFR Part 60 Appendix A shall be used to demonstrate compliance.

b. Emission Limitation:

91.7 pounds per hour particulate emissions

Applicable Compliance Method:

If required, the procedures specified under OAC rule 3745-17-03(B)(10) shall be used to demonstrate compliance.

c. Emission Limitation:

0.020 pound particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the procedure specified under OAC rule 3745-17-03(B)(9) shall be used to demonstrate compliance.

d. Emission Limitation:

0.92 pound SO_2 per thousand pounds of fresh feed

Applicable Compliance Method:

If required, the procedures specified under OAC rule 3745-18-04(A) shall be used to demonstrate compliance.

e. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling 3-hour average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

f. Emission Limitation:

particulate emissions shall not exceed 1 pound per 1,000 pounds of coke burned

Applicable Compliance Method:

If required, the procedures specified under 40 CFR 63.1571 and under the conditions specified in Table 4 of 40 CFR Part 63, Subpart UUU shall be used to demonstrate compliance.

g. Emission Limitation:

500 ppmvd CO as a one-hour average

Applicable Compliance Method:

If required, Method 10 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

h. Emission Limitation:

Emission limitation options under 40 CFR Part 63, Subpart UUU

Applicable Compliance Method:

The permittee shall demonstrate continuous compliance with the emission limitation options according to 40 CFR Part 63, Subpart UUU [see Part II of this permit].

i. Emission Limitation:

SO_2 emissions from the FCCU shall not exceed 351 ppmvd at 0% oxygen as a rolling 7-day average

Applicable Compliance Method:

The Monitoring and Record keeping Requirements of Section A.III shall serve as demonstration of compliance with this emission limitation. If required, the permittee shall demonstrate compliance using Method 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

j. Emission Limitation:

SO_2 emissions from the FCCU shall not exceed 190 ppmvd at 0% oxygen as a rolling 365-day average

Applicable Compliance Method:

The Monitoring and Record keeping Requirements of Section A.III shall serve as demonstration of compliance with this emission limitation. If required, the permittee shall demonstrate compliance using Method 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

k. Emission Limitation:

20 ppmvd ammonia

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using U.S. EPA Conditional Test Method (CTM) 027. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

l. Emission Limitation:

41.61 tons per year ammonia

Applicable Compliance Method:

The annual emission limitation is based on the allowable hourly emission rate at 8,760 hours per year, therefore, compliance with the short-term emission limitation constitutes compliance with the annual emission limitation.

2. Each CEMS shall be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA shall be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B of 40 CFR Part 60 (e.g., PS 2 for SO_2 and NO_X). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

      i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

      ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

   c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B of 40 CFR Part 60 for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

3. Emission testing requirements

   a. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

      i. The emission testing shall be conducted within 6 months after the effective date of this permit to demonstrate compliance with the allowable mass emission rate for particulate emissions and SO_2. This emissions testing will also be suitable to demonstrate compliance with the allowable mass emissions rate for particulate emissions required under 40 CFR Part 63, Subpart UUU if conducted no later than 150 days after April 11, 2005.

ii. The emission testing shall be conducted according to the schedule for the initial compliance test under 40 CFR 63.1571 (i.e., within 150 days after April 11, 2005) to demonstrate compliance with the allowable mass emission rate for metal HAP emissions and organic HAP emissions.

iii. The emission testing shall be conducted within 12 months prior to expiration of this permit to demonstrate compliance with the allowable ammonia emissions of 20 ppmvd.

iv. Emission testing shall also be conducted within 12 months prior to the expiration of this permit to demonstrate compliance with the allowable mass emission rate for particulate emissions, SO_2, metallic HAPs and organic HAPs, if this more frequent testing is consistent with OEPA Engineering Guide 16, i.e., the results from the most recent emission tests demonstrate the emissions unit is major and emissions are within 10% of the allowable emission limits.

v. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

(a) For Particulate Emissions:

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA. The representative average pounds of particulate emissions per hour shall be calculated according to the following method as described in the March 6, 1979 memo from the U.S. EPA Director of the Division of Stationary Source Enforcement regarding the effect on non-continuous, non-automatic soot blowing during performance testing steam generators that are subject to NSPS.

$$E = [E_{SBR} \times ((A + B)S) \div (AR)] + [E_{NOSB}((R - S) \div R) - (BS \div AR)]$$

where:

E = pounds of particulate emissions per hour (average for daily operating time)

E_{SBR} = average E of sample(s) containing soot blowing

E_{NOSB} = average E of sample(s) with no soot blowing

A = hours soot blowing during sample(s)

B = hours not soot blowing during sample(s) containing soot blowing

R = average hours of operation per 24 hours

S = average hours of soot blowing per 24 hours

(b) For SO_2 emissions: Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA. A relative accuracy test audit (RATA) conducted within 6 months of this time frame can be used in lieu of a separate stack test provided the following conditions are met.

(i) Three (3) RATA test runs are added together to equal one (1) stack test run;

(ii) The emissions unit is operating at or near it's maximum capacity; and,

(iii) The drift test passes at the end of each RATA test run.

(c) For metal HAP emissions: Conduct a performance test according to the requirements in 40 CFR 63.1571 and under the conditions specified in Table 4 of 40 CFR Part 63 subpart UUU.

(d) For organic HAP emissions: Conduct a performance test according to the requirements of 40 CFR 63.1571 and under the conditions specified in Table 11 of 40 CFR Part 63 subpart UUU.

(e) For ammonia emissions: Conditional Test Method 027 shall be used to demonstrate compliance. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. The test(s) shall be conducted while the emissions unit is operating at or near its maximum catalyst circulation rate and cold catalyst addition rate, unless otherwise specified or approved by the Toledo Division of Environmental Services. At least one of the test runs shall be performed during a period of representative soot blowing for not less than one hour.

c. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

d. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

e. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s).

The test report shall also include the following information obtained during the test :

i. continuous opacity monitoring data generated through each test run (six-minute average);

ii. FCCU fresh gas oil feed rate (barrels per day);

iii. Catalyst circulation rate (tons per hour);

iv. cold catalyst addition rate (tons per hour); and,

v. $DeSO_x$ catalyst addition rate (pounds per hour)

The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

4. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the permittee shall audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA shall always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of EPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

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: **P009**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009 - Sulfur Recovery Unit (SRU) No. 1 with Tail Gas Treater, Thermal Oxidizer, and sulfur pit. All fugitive emissions from the SRU No. 1 are included with this emissions unit.	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See section A.I.2.a.
	OAC rule 3745-31-05(D) (PTI 04-1046 as modified on August 5, 1998)	See section A.II.1.
	40 CFR Part 60, Subpart J 40 CFR Part 52.21	See section A.I.2.b.
	OAC rule 3745-18-54(W)(7)	See section A.I.2.f.
	OAC rule 3745-21-09(T)	See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.d and Part II, sections A.63 through A.77.
	40 CFR Part 63, Subpart UUU	See section A.I.2.e and Part II, sections A.78 through A.98.

2. Additional Terms and Conditions

2.a The permittee shall re-route all NSPS sulfur recovery plant sulfur pit emissions such that they are treated, monitored, and included as part of the sulfur recovery plant's emissions subject to the NSPS Subpart J limit for SO_2, 40 CFR 60.104(a)(2), by no later than the first turnaround of the Claus train that occurs after July 18, 2001.

2.b The permittee shall not discharge or cause the discharge of any gases into the atmosphere from any Claus sulfur recovery plant containing in excess of 250 ppm by volume (dry basis) of sulfur dioxide (SO_2) at zero percent excess air.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

2.c The permittee shall comply with all applicable equipment leak terms and conditions referencing OAC rule 3745-21-09(T) in Part II, section A.4.c of this permit.

2.d In accordance with 40 CFR Part 63, Subpart CC, the permittee shall comply with the applicable equipment leak provisions of 40 CFR Part 60, Subpart VV [see Part II, sections A.6 throguh A.22 of this permit] and paragraph (b) of 40 CFR 63.648 [see Part II, section A.70 of this permit] (except as provided in paragraphs (a)(1), (a)(2), and (c) through (i) of 40 CFR 63.648).

2.e The permittee shall comply with the requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II of this permit] by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR 63.1563(c).

2.f The permittee shall not cause or permit the emission of sulfur dioxide from this emissions unit to exceed a maximum of 0.025 per cent by volume of sulfur dioxide at zero per cent oxygen on a dry basis. The bypassing of any significant quantities of 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.

II. Operational Restrictions

1. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
The permittee shall continue to implement and maintain the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The comprehensive plan shall include, but not be limited to, the following:

a. an identification of events, within the SRU or Tail Gas Treater or upstream/downstream units/operations, likely to cause malfunctions and/or non-routine shutdowns or bypasses of the SRU or Tail Gas Treater, and a description of the steps taken to prevent or minimize the likelihood of such events from occurring;

b. a description of steps or procedures reasonably available to be taken in order to prevent or minimize flaring of feeds to the SRUs during any period when one or more SRUs is shutdown or being bypassed, along with an indication of limitations on the availability of such steps;

c. a description of steps to be taken to minimize excess emissions from the SRUs during routine or scheduled startups and shutdowns of the SRUs and Tail Gas Treater;

d. a comprehensive preventive maintenance program, including a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

e. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

f. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

III. Monitoring and/or Record Keeping Requirements

1. SO_2 Continuous Emissions Monitoring System

a. The permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of SO_2 emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

i. The span values for this monitor are 500 ppm SO_2 and 25 percent O2.

ii. The performance evaluations for this SO_2 monitor under 40 CFR 60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

b. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

c. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the CD prior to resetting the calibration, if performed, or record the amount of adjustment.

d. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD

check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

e. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

f. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

g. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

i. Calibration of CEMS.
ii. CD determination and adjustment of CEMS.
iii. Preventive maintenance of CEMS (including spare parts inventory).
iv. Data recording, calculations, and reporting.
v. Accuracy audit procedures including sampling and analysis methods.
vi. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F, Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

h. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

i. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

2. The permittee shall maintain daily records of the following information, while the emissions unit is in operation:

   a. the total SO_2 emissions, in pounds, from the Claus unit and the flare(s); and

   b. the average SO_2 emission rate, including emissions from the flare(s), in percent by volume of SO_2 at zero percent oxygen on a dry basis.

3. Except as otherwise provided above, all records required under Section A.III of this permit shall be maintained in accordance with the Monitoring and Related Record Keeping Requirements of Part I - General Terms and Conditions.

IV. Reporting Requirements

1. SO_2 Continuous Emissions Monitoring System Reporting Requirements

   a. The permittee shall submit an SO_2 excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 12-hour average concentration greater than 250 ppm by volume (dry basis) of SO_2 at zero percent excess air and all instances of SO_2 values in excess of the applicable limit specified in OAC rule 3745-18-54(W)(7). Each report shall quantify the SO_2 emissions resulting from the bypassing of the SRU to the refinery flare system. Written reports of excess emissions shall include the following information:

      i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

      ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

      iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

      iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

   ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60 Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

   i. Permittee name and address.
   ii. Identification and location of monitors in the CEMS.
   iii. Manufacturer and model number of each monitor in the CEMS.
   iv. Assessment of CEMS data accuracy and date of assessment as determined by a RATA, RAA, or CGA described in Section 5 of 40 CFR Part 60 Appendix F Procedure 1 including the RA for the RATA, the A for the RAA or CGA, the RM results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.
   v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.
   vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 of 40 CFR Part 60 Appendix F Procedure 1.

   An example of a DAR format is shown in Figure 1 of 40 CFR Part 60 Appendix F, Procedure 1.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation

      250 ppm by volume (dry basis) of SO_2 at zero percent excess air

      maximum of 0.025 per cent by volume of sulfur dioxide at zero per cent oxygen on a dry basis

      Applicable Compliance Method

      The monitoring and record keeping requirements under A.III shall serve as demonstration of compliance with this emission limitation. If required, the procedures outlined under 40 CFR 60.106(f) shall be used to demonstrate compliance.

2. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B (e.g., PS 2 for SO_2 and NO_X). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

      i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

      ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

   c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B for the relative accuracy test,

except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

VI. Miscellaneous Requirements

1. Continuous SO_2 Monitoring - Certified Systems Statement of Certification
A statement of certification of the existing continuous SO_2 monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6. Proof of certification shall be made available to the Toledo Division of Environmental Services upon request.

2. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1 the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

3. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

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. Miscellaneo us Requirements

None

Emissions Unit ID: **P010**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P010 - This emissions unit is a distillation tower and vacuum distillation tower identified as Crude 2 and Crude Vacuum 2. Vapors extracted from Crude Vacuum 2 are ducted to the refinery fuel gas system. All fugitive emissions from Crude Vac 2 are included with this emissions unit.	OAC rule 3745-18-54(W)(2)	See section A.I.2.g
	OAC rule 3745-21-09(M)(1)	See section A.I.2.a and Part II, section A.4.b.
	OAC rule 3745-21-09(T)	See section A.I.2.b.
	40 CFR Part 63, Subpart A	See sections A.I.2.c and A.I.2.d and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.d and A.I.2.e and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart GGG	See section A.I.2.h and Part II, sections A.23 through A.25.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.f.

2. Additional Terms and Conditions

2.a The permittee shall control the emissions from the vacuum producing system by ducting the vapors to the refinery fuel gas system.

2.b Refer to Part II, section A.4.c for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

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

2.d Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.e Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.f Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions referencing 40 CFR Part 63, Subpart CC.

2.g This emission limitation is less stringent than the emission limitation specified under 40 CFR 60.104. Emissions from the vacuum producing system are ducted to the refinery fuel gas system. All refinery heaters and boilers burning refinery fuel gas are subject to the standards for sulfur oxides under 40 CFR 60.104 (NSPS Subpart J) which restricts the permittee from burning in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf). Continuous compliance with this emission limitation is monitored by the permittee's hydrogen sulfide continuous emissions monitoring systems (CEMS). Monitoring, recordkeeping, reporting and testing requirements for the fuel gas CEMS are contained under the specific emissions unit terms and conditions for fuel burning equipment in Part III. of this permit.

2.h Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
P011 - This emissions unit is a distillation tower and vacuum distillation tower identified as Crude 1 and Crude Vacuum 1. Vapors extracted from Crude Vacuum 1 are vented to the Crude 1 Amine Contactor and combusted in the Crude 1 Furnace (B015). All fugitive emissions from Crude Vac 1 are included with this emissions unit.	OAC rule 3745-18-54(W)(2)	0.40 pound of sulfur dioxide (SO_2) per ton of actual process weight input See section A.I.2.g.
	OAC rule 3745-21-09(M)(1)	See section A.I.2.a and Part II, section A.4.b.
	OAC rule 3745-21-09(T)	See section A.I.2.b.
	OAC rule 3745-31-05(D) (PTI 04-1046 as issued on 8/5/1998)	4.47 tons/yr SO_2 based on a rolling, 12-month summation See section A.I.2.f.
	40 CFR Part 63, Subpart A	See sections A.I.2.c and A.I.2.d and Part II, sections A.26 through A.35.
	40 CFR Part 63 Subpart CC	See sections A.I.2.d and A.I.2.e.
	40 CFR Part 60, Subpart GGG	See section A.I.2.h and Part II, sections A.23 through A.25.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.g.

2. Additional Terms and Conditions

2.a The permittee shall control the emissions from this vacuum producing system by piping the vapors to the firebox of the Crude 1 Furnace (B015).

2.b Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

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

2.d Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.e Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.f The permittee shall vent the Crude Vacuum 1 Unit off-gas to the Crude 1 Amine Contactor to reduce the hydrogen sulfide (H_2S) content of the off-gas. The Crude 1 Amine Contactor vent stream shall be burned in the Crude 1 Furnace (B015). The H_2S content of the Crude Vacuum 1off-gas shall be controlled to a level so that emissions resulting from combustion of the off-gas do not exceed 4.47 tons as SO_2 per year based upon a rolling, 12-month summation of the monthly emissions. A CEM on this vapor stream ensures compliance with the 160 ppm H_2S requirement.

2.g Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions referencing 40 CFR Part 63, Subpart CC.

2.h Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor and record the following at least once per day for Crude Vacuum 1:

   a. daily flow of the off-gas in cubic feet from Crude Vacuum 1;

   b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

   c. the daily H_2S concentration in the off-gas by indicator tube readings or other comparable analytical techniques. H_2S concentration shall be determined at a point which is representative of the day's H_2S level, to the extent possible;

   d. the daily total SO_2 emissions;

e. the hourly SO_2 emission rate;

f. the monthly total SO_2 emissions;

g. the total SO_2 emissions per rolling, 12-month period; and

h. an estimate of the organic compound emission rate and organic compound content, in ppm, of Crude Vacuum 1 off-gas when it is not being burned in the Crude/Vac 1 Furnace (B015).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any of the following occurrences:

   a. each period that data was not obtained and recorded as required by section A.II.2;

   b. each month when the SO_2 emissions exceeded 4.47 tons per year as a rolling, 12-month summation;

   c. each day in which the hourly SO_2 emission rate exceeded 0.40 pound of SO_2 per ton of actual process weight input; and

   d. each period when the off-gas from Crude Vacuum 1 is not being burned in the Crude/Vac 1 Furnace (B015). These reports shall include the estimated organic compound emission rate and the organic compound content, in ppm, of off-gas during each period when the off-gas is not being burned in the Crude/Vac 1 Furnace (B015).

   If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

2. The deviation reports shall be submitted to the Toledo Division of Environmental Services on a quarterly basis and are due January 30, April 30, July 30 and October 30 for the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

   0.40 pound of SO_2 per ton of actual process weight input

   Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 6 of 40 CFR Part 60 to demonstrate compliance. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:

4.47 tons/yr SO_2 as a rolling, 12-month summation

Applicable Compliance Method:

Multiply the daily sample(s) average H_2S content by the actual offgas flow in mmscf/day (or sample period) to determine pounds per day. The total daily gas flow may be used when only 1 sample per day is collected. Total the daily H_2S amounts to determine the monthly total H_2S emissions. Convert H_2S to SO_2 at a rate of 34 pounds of H_2S to 64 pounds of SO_2 to determine the monthly total SO2 emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total SO_2 emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **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 - bio sludge filter press used for biological sludge and as backup for oily sludge	OAC rule 3745-31-05(A)(3) (PTI 04-379 as issued on 3/11/87)	See section A.I.2.a.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d and Part II, sections A.63 through A.77.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit in accordance with good engineering practice.

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63 [see Part II, sections A.26 through A.35].

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d This emissions unit is a Group 2 Miscellaneous Process Vent and has no applicable emission limit or control requirement under this regulation.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P014**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P014 - oily sludge belt filter press (backup biological sludge)	OAC rule 3745-21-09(T)	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-379 as issued on 3/11/87)	See section A.II.1.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c through A.I.2.e and Part II, sections A.63 through A.77.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63 [see Part II, sections A.26 through A.35].

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e This emissions unit is a Group 2 Miscellaneous Process Vent and has no applicable stack emission limit under this regulation.

II. Operational Restrictions

1. The operating hours of this emissions unit shall not exceed 4380 hours per year.

2. Refer to Part II, sections A.6 through A.18 and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the total operating hours of this emissions unit and maintain records of the total operating hours per year.

2. Refer to Part II, sections A.6 through A.18 and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

IV. Reporting Requirements

1. The permittee shall submit a semi-annual report summarizing the operating hours of this emissions unit during the calendar year. This report shall be submitted to the Toledo Division of Environmental Services by January 30 and July 30 of each year and shall summarize the previous 12-month period.

2. The permittee shall submit semi-annual deviation (excursion) reports that identify all periods in which the emissions unit was operated in excess of 4,380 hours per year.

   If no deviations occurred during the 6-month period, then the permittee shall submit a report, which states that no deviations occurred during that 6-month period. These reports shall be submitted by January 30 and July 30 of each year and shall cover the previous 6-month period.

3. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63.

4. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63.

2. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P017 - Coker 2/ delayed petroleum coker	OAC rule 3745-21-09(T)	See section A.I.2.a.
	OAC rule 3745-21-09(UU)(3)	See sections A.I.2.h and A.I.2.i and Part II, section A.4.f.
	OAC rule 3745-31-05(A)(3) (PTI 04-945 as issued on 4/26/1995)	18.3 tons per year of volatile organic compound (VOC) emissions (from coke cutting and equipment leaks) 4.1 pounds of VOC per coking cycle 1.3 tons per year VOC from the flare 109.5 pounds of sulfur dioxide (SO_2) per coking cycle 34.3 tons per year SO_2 from the flare See sections A.I.2.b, A.I.2.g, and A.I.2.h.
	40 CFR Part 60, Subpart GGG	See section A.I.2.c and Part II, sections A.23 through A.25.
	40 CFR Part 63, Subpart A	See sections A.I.2.d and A.I.2.e and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.e and A.I.2.f.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.j.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subpart GGG.

2.c Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

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

2.e Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.g The short-term and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.

2.h Refer to Part II of this permit for the applicable monitoring, record keeping, reporting and testing requirements for refinery flares.

2.i The Coker 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d)[see Part II, section A.4.e of this permit].

2.j Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions referencing 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The maximum allowable operating rate for this emissions unit is 626 coking cycles per year.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the number of coking cycles completed each day.

2. The permittee shall collect and record the following information each day: the operating times for the capture (collection) system, control device, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semi-annual deviation (excursion) reports of:

   a. any exceedances of the 626 coking cycles per year operational restriction; and

   b. any periods in which the capture (collection) system and/or control device was not in operation while the emissions unit was in operation.

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

   These reports shall be submitted semi-annually, i.e., by January 30 and July 30 of each year, and shall cover the previous 6 calendar months.

V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   1.a Emission Limitation:

   18.3 tons per year VOC emissions from coke cutting and equipment leaks

   Applicable Compliance Method:

   The 18.3 tons/yr VOC emission limit is based on the potential to emit for this emissions unit. The potential to emit was determined by adding the tons/yr VOC emissions from coke cutting and equipment leaks.

   The maximum tons per year VOC emission from coke cutting was determined by multiplying the maximum of 626 coking cycles per year by the BP derived emission factor for coke cutting of 18 pounds of VOC emissions per coking cycle to obtain 5.63 tons/yr VOC emissions from coke cutting.

   The maximum tons per year VOC emissions from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg,

multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per year for each type of leaking component for a total of 12.57 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

1.b Emission Limitation:

4.1 pounds VOC emissions per coking cycle from the flare

Applicable Compliance Method:

This emission limit is based on the BP derived uncontrolled emission factor of 205.8 pounds per coking cycle multiplied by 0.02 to account for a flare control efficiency of 98% when emissions were previously vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

1.c Emission Limitation:

1.3 tons per year VOC emissions from the flare

Applicable Compliance Method

This emission limitation is based on the 4.1 lb/coking cycle VOC emission limit multiplied by the maximum of 626 coking cycles per year and divided by 2000 pounds per ton when the emissions were vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

1.d Emission Limitation:

109.5 pounds SO_2 per coking cycle

Applicable Compliance Method:

This emission limitation is based on the BP derived emission factor when the blowdown emissions were vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

1.e Emission Limitation:

34.3 tons per year SO_2 emissions from the flare

Applicable Compliance Method:

This emission limitation is based on 109.5 lbs/coking cycle SO_2 multiplied by the maximum of 626 coking cycles per year and divided by 2000 pounds per ton when the blowdown emissions were vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

2. For equipment leaks in section A.V, see the applicable sections in Part II for 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T) referenced in sections A.I.2.a and A.I.2.f of this emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P019**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P019 - Reformer 1/ Catalytic reformer with cyclic catalyst regeneration controlled by the West Flare	40 CFR Part 63, Subpart UUU	See section A.I.2.a.
	equipment leaks 40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	OAC rule 3745-21-09(T)	See section A.I.2.e.

2. Additional Terms and Conditions

2.a The permittee shall comply with the requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.78 through A.98 of this permit] by no later than April 11, 2005.

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35 of this permit] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance

with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

II. Operational Restrictions

1. The permittee shall comply with the standards for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.82 through A.88, A.95, and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the monitoring and record keeping requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.90, A.91, A.94, and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

IV. Reporting Requirements

1. The permittee shall comply with the reporting requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.92, A.93, and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

V. Testing Requirements

1. The permittee shall comply with the testing requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.89 and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P020**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P020 - Reformer 2/ Catalytic reformer with cyclic catalyst regeneration controlled by the West Flare	40 CFR Part 63, Subpart UUU	See section A.I.2.a.
	equipment leaks 40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	OAC rule 3745-21-09(T)	See section A.I.2.e.
	40 CFR Part 60, Subpart GGG	See section A.I.2.f and Part II, sections A.23 through A.25.

2. Additional Terms and Conditions

2.a The permittee shall comply with the requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.78 through A.98 of this permit] by no later than April 11, 2005.

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35 of this permit] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.f Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The permittee shall comply with the standards for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.82 through A.88, A.95, and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

4. Refer to Part II, sections A.23 through A.25, and A.70 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart GGG.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the monitoring and record keeping requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.90, A.91, A.94, and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

IV. Reporting Requirements

1. The permittee shall comply with the reporting requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.92, A.93, and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

V. Testing Requirements

1. The permittee shall comply with the testing requirements for existing sources in 40 CFR Part 63, Subpart UUU [see Part II, sections A.89 and A.98 of this permit] after April 11, 2005.

2. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P021 -Alkyl 1/Alkylation Unit with blowdown emissions controlled by the West Flare	OAC rule 3745-21-09(T)	See section A.I.2.a.
	OAC rule 3745-21-09(UU)(2)	See sections A.I.2.e and A.I.2.f.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.g.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35 of this permit] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e The Alkyl 1 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [see Part II, section A.4.e of this permit].

2.f Refer to Part II, sections A.3, A.4.e, A.4.f, and A.200 of this permit for the applicable monitoring, record keeping, reporting and testing requirements for this refinery flare.

2.g Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions referencing 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.63 through A.65 of this permit for the applicable miscellaneous process vent standards referencing 40 CFR Part 60, Subpart CC.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day: the operating times for the capture (collection) system, control device, and the associated emissions unit.

2. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

4. Refer to Part II, sections A.3, A.4.e, and A.4.f of this permit for the applicable monitoring and record keeping requirements for this refinery flare.

IV. Reporting Requirements

1. The permittee shall submit semi-annual deviation (excursion) reports of any periods in which the capture (collection) system and/or control device was not in operation while the emissions unit was in operation.

   If no deviations occurred during the 6-month period, then the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

   These reports shall be submitted semi-annually i.e., by January 30 and July 30 of each year, and shall cover the previous 6 calendar months.

2. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

4. Refer to Part II, sections A.3, A.4.e and A.4.f of this permit for the applicable reporting requirements for this refinery flare.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, section A.200 of this permit for the applicable testing requirements for this refinery flare.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P022 -Alkyl 2/Alkylation Unit with blowdown emissions controlled by the West Flare	OAC rule 3745-21-09(T)	See section A.I.2.a.
	OAC rule 3745-21-09(UU)(2)	See section A.I.2.e and A.I.2.f.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	40 CFR Part 60, Subpart GGG	See section A.I.2.h and Part II, sections A.23 through A.25.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.g.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e The Alkyl 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) (see Part II, section A.4.e of this permit).

2.f Refer to Part II, sections A.3, A.4.e, A.4.f, and A.200 of this permit for the applicable monitoring, record keeping, reporting and testing requirements for this refinery flare.

2.g Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions referencing 40 CFR Part 63, Subpart CC.

2.h Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.63 through A.65 of this permit for the applicable miscellaneous process vent standards referencing 40 CFR Part 63, Subpart CC.

4. Refer to Part II, sections A.23 through A.25, and A.70 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart GGG.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e, and A.4.f of this permit for the applicable monitoring and record keeping requirements for this refinery flare.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e and A.4.f of this permit for the applicable reporting requirements for this refinery flare.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, section A.200 of this permit for the applicable testing requirements for this refinery flare.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P023 -Alky 3 /Alkylation Unit vented to the Alkyl 2 (P022) blowdown. Emissions from the Alkyl 2 blowdown are controlled by the West Flare.	OAC rule 3745-21-09(T)	See section A.I.2.a.
	OAC rule 3745-21-09(UU)(2)	See sections A.I.2.e and A.I.2.f.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	40 CFR Part 60, Subpart GGG	See section A.I.2.h and Part II, sections A.23 through A.25.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.g.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35 of this permit] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e The Alkyl 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) (see Part II, section A.4.e of this permit).

2.f Refer to Part II, sections A.3, A.4.e, A.4.f, and A.200 of this permit for the applicable monitoring, record keeping, reporting and testing requirements for this refinery flare.

2.g Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions referencing 40 CFR Part 63, Subpart CC.

2.h Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.63 through A.65 of this permit for the applicable miscellaneous process vent standards referencing 40 CFR Part 63, Subpart CC.

4. Refer to Part II, sections A.23 through A.25, and A.70 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart GGG.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e, and A.4.f of this permit for the applicable monitoring and record keeping requirements for this refinery flare.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e and A.4.f of this permit for the applicable reporting requirements for this refinery flare.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, section A.200 of this permit for the applicable testing requirements for this refinery flare.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P025**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P025 - Process Oily Water System and stormwater system (including drains, manholes, junction boxes, lift stations, laterals and trunklines) within the refinery and refinery wastewater treatment system (excluding Belt Filter Presses P013 and P014) with the following treatment and control systems: carbon canisters and benzene stripper vented to the West Flare	OAC rule 3745-21-09(M)(2)	See section A.I.2.a and Part II, section A.4.b.
	OAC rule 3745-21-09(UU)(4)	See section A.I.2.e.
	40 CFR Part 60, Subpart A	See section A.I.2.g and Part II, section A.5.
	40 CFR Part 61, Subpart A	See section A.I.2.i.
	40 CFR Part 60, Subpart QQQ	See sections A.I.2.c and A.I.2.f.
	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.
	40 CFR Part 61, Subpart FF	See section A.II.2.
	40 CFR Part 63, Subpart CC	See sections A.I.2.d.
miscellaneous process vents	40 CFR Part 63, Subpart CC	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, section A.63] is made to a petroleum refining process unit subject to this subpart, and the change causes a Group 2 emission point to become a Group 1 emission point (as defined in 40 CFR 63.641), then the permittee shall comply with the requirements for existing sources for the Group 1 emission point as expeditiously as practicable, but in no event later than 3 years after the emission point becomes Group 1.

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

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

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

iv. [63.647(a)]
Except as provided in 40 CFR 63.647(b), the permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641 [see section A.I.2].

v. (a) [63.641]
A *Group 1 wastewater stream* means a wastewater stream at a petroleum refinery with a total annual benzene loading of 10 megagrams (Mg) per year or greater as calculated according to the procedures in 40 CFR 61.342 of Subpart FF that has a flow rate of 0.02 liters per minute or greater, a benzene concentration of 10 parts per million by weight or greater, and is not exempt from control requirements under the provisions of 40 CFR Part 61, Subpart FF.

(b) *A Group 2 wastewater stream* means a wastewater stream that does not meet the definition of Group 1 wastewater stream.

2.c [63.640(o)]
Overlap of Subpart CC with other regulations for wastewater.

i. [63.640(o)(1)]
A Group 1 wastewater stream managed in a piece of equipment that is also subject to the provisions of 40 CFR Part 60, Subpart QQQ, is required to comply only with 40 CFR Part 63, Subpart CC.

ii. [63.640(o)(2)]
A Group 1 or Group 2 wastewater stream that is conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR 63.133 through 63.147 of Subpart G wastewater provisions shall comply as specified in 63.640(o)(2)(i) or (o)(2)(ii). Compliance with the provisions of this paragraph shall constitute compliance with the requirements of 40 CFR Part 63, Subpart CC for that wastewater stream.

(a) [63.640(o)(2)(i)]
Comply with 63.640(o)(2)(i)(A) through (o)(2)(i)(C).

(i) [63.640(o)(2)(i)(A)]
The provisions in 40 CFR 63.133 through 63.140 of Subpart G for all equipment used in the storage and conveyance of the Group 1 or Group 2 wastewater stream.

(ii) [63.640(o)(2)(i)(B)]
The provisions in both 40 CFR Part 61, Subpart FF and in 40 CFR 63.138 and 63.139 of Subpart G for the treatment and control of the Group 1 or Group 2 wastewater stream.

(iii) [63.640(o)(2)(i)(C)]
The provisions in 40 CFR 63.143 through 63.148 of Subpart G for monitoring and inspections of equipment and for record keeping and reporting requirements. The permittee is not required to comply with the monitoring, record keeping, and reporting requirements associated with the treatment and control requirements in 40 CFR 61.355 through 61.357.

(b) [63.640(o)(2)(ii)]
Comply with the 40 CFR 63.640(o)(2)(ii)(A) and (o)(2)(ii)(B).

(i) [63.640(o)(2)(ii)(A)]
Comply with the provisions of 40 CFR 63.133 through 63.148 and 63.151 and 63.152 of Subpart G.

(ii) [63.640(o)(2)(ii)(B)]
For any Group 2 wastewater stream or organic stream whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR Part 61, Subpart FF on or after December 31, 1992, comply with the requirements of 40 CFR 63.133 through 63.147 of Subpart G for Group 1 wastewater streams.

2.d Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77, 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.4.e]. 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 II through V of this permit.

2.f [60.692-1(a)]
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. See Table 1 in section A.VI for a list of affected facilities (all are individual drain systems) subject to the requirements of 40 CFR Part 60, Subpart QQQ.

2.g 40 CFR Part 60, Subpart A provides applicability provisions, definitions and other general provisions that are pertinent to emissions units subject to 40 CFR Part 60. The definitions listed under 40 CFR 60.691 apply for all standards and requirements under 40 CFR Part 60, Subpart QQQ.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

2.h Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions, referencing 40 CFR Part 63, Subpart CC.

2.i 40 CFR Part 61, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 61. The definitions listed in 40 CFR 61.341 apply for all the standards and requirements under 40 CFR Part 61, Subpart FF.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart CC

a. [63.642(k)] GENERAL STANDARDS
The permittee of an existing source may comply, and the permittee of a new source shall comply with the wastewater provisions in 40 CFR 63.647 [see section A.II].

i. [63.642(k)(1)]
The permittee using this compliance approach shall also comply with the requirements of 40 CFR 63.654 [see section A.IV] as applicable.

ii. [63.642(k)(2)]
The permittee using this compliance approach is not required to calculate the annual emission rate specified in 40 CFR 63.642(g) of Subpart CC.

b. [63.647] WASTEWATER PROVISION

i. [63.647(b)]
As used in this section, all terms not defined in 40 CFR 63.641 shall have the meaning given them in the Clean Air Act or in 40 CFR 61.341, of Subpart FF.

ii. [63.647(c)]
Each permittee required under 40 CFR Part 61, Subpart FF to perform periodic measurement of benzene concentration in wastewater, or to monitor process or control device operating parameters shall operate in a manner consistent with the minimum or maximum (as appropriate) permitted concentration or operating parameter values. Operation of the process, treatment unit, or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in 40 CFR Part 61, Subpart FF, shall constitute a violation of the standard.

c. Miscellaneous Process Vents
See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

2. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.340] Applicability

i. [61.340(c)]
The following waste is exempt from the requirements of 40 CFR Part 61, Subpart FF.

(a) Waste in the form of gases or vapors that is emitted from process fluids; and
(b) Waste that is contained in a segregated stormwater sewer system.

ii. [61.340(d)]

Any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in 40 CFR 61.341, is exempt from 40 CFR 61 Subpart FF. No testing, monitoring, record keeping, or reporting is required under 40 CFR Part 61, Subpart FF for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

b. [61.341] Definitions
The definitions listed in 40 CFR 61.341 apply for all the standards and requirements under 40 CFR Part 61, Subpart FF.

c. [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.

d. [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) [61.343(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) [61.343(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) [61.343(a)(1)(i)(C)(3)]

The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(ii) [61.343(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirement of 40 CFR 61.349 [see section A.III].

(b) [61.343(a)(2)]
The permittee must install, operate and maintain an enclosure and closed-vent system that routes all organic vapors vented from the tank, located inside the enclosure, to an enclosed combustion control device in accordance with the requirements specified in 40 CFR 61.343(e).

ii. [61.343(b)]
For a tank that meets all the conditions specified in 40 CFR 61.343(b)(1), the permittee may elect to comply with 40 CFR 61.343(b)(2) as an alternative to the requirements specified in 40 CFR 61.343(a)(1).

(a) [61.343(b)(1)]
The waste managed in the tank complying with 40 CFR 61.343(b)(2) shall meet all of the following conditions:

(i) [61.343(b)(1)(i)]
Each waste stream managed in the tank must have a flow-weighted annual average water content less than or equal to 10 percent water, on a volume basis as total water.

(ii) [61.343(b)(1)(ii)]
The waste managed in the tank either has a maximum organic vapor pressure less than 5.2 kilopascals (kPa) (0.75 pounds per square inch (psi)); has a maximum organic vapor pressure less than 27.6 kPa (4.0 psi) and is managed in a tank having design capacity less than 151 m^3 (40,000 gal); or has a maximum organic vapor pressure less than 76.6 kPa (11.1 psi) and is managed in a tank having a design capacity less than 75 m^3 (20,000 gal).

(b) [61.343(b)(2)]
The permittee shall install, operate, and maintain a fixed roof as specified in 40 CFR 61.343(a)(1)(i).

(c) [61.343(b)(3)]
For each tank complying with 40 CFR 61.343(b), one or more devices which vent directly to the atmosphere may be used on the tank provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or

permanent deformation of the tank or cover resulting from filling or emptying the tank, diurnal temperature changes, atmospheric pressure changes or malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

iii. [61.343(e)]
If the permittee controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device, then the permittee must meet the requirements specified in paragraphs (e)(1) through (4) of 40 CFR 61.343(e).

(a) [61.343(e)(1)]
The tank must be located inside a total enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The permittee must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements 40 CFR 264.1084(i) or 40 CFR 265(i)is not required to make repeat demonstrations of initial and continuous compliance for the purposes of 40 CFR Part 61, Subpart FF.

(b) [61.343(e)(2)]
The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in 40 CFR 61.349.

(c) [61.343(e)(3)]
Safety devices, as defined in 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.

e. [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].

f. [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.

g. [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.

h. [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.

i. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR Part 61, Subpart FF

i. [61.348(a)]
Except as provided in paragraph 40 CFR 61.348(a)(5), the permittee shall treat the waste stream in accordance with the following requirements:

(a) [61.348(a)(1)]
The permittee shall design, install, operate, and maintain a treatment process that either:

(i) [61.348(a)(1)(i)]
Removes benzene from the waste stream to a level less than 10 parts per million by weight (ppmw) on a flow-weighted annual average basis;

(ii) [61.348(a)(1)(ii)]
Removes benzene from the waste stream by 99 percent or more on a mass basis; or

(iii) [61.348(a)(1)(iii)]
Destroys benzene in the waste stream by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.

(b) [61.348(a)(2)]
Each treatment process complying with 40 CFR 61.348(a)(1)(i) or (ii) shall be designed and operated in accordance with the appropriate waste management unit standards specified in 40 CFR 61.343 through 61.347 [see sections A.II. and A.III]. For example, if a treatment process is a tank, then the permittee shall comply with 40 CFR 61.343 [see sections A.II. and A.III].

(c) [61.348(a)(3)]
For the purpose of complying with the requirements specified in paragraph a.i. of 40 CFR 61.348, the intentional or unintentional reduction in the benzene concentration of a waste stream by dilution of the waste stream with other wastes or materials is not allowed.

(d) [61.348(a)(4)]
The permittee may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with the requirements of paragraph (a)(1) of 40 CFR 61.348 except as provided by 40 CFR 61.348(a)(5).

(e) [61.348(a)(5)]
If the permittee aggregates or mixes any combination of process wastewater, product tank drawdown, or landfill leachate subject to 40 CFR 61.342(c)(1) [see section A.II] together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with 40 CFR 61.348(b) These provisions apply to above-ground wastewater treatment systems as well as those that are at or below ground level.

ii. [61.348(b)]
Except for facilities complying with 40 CFR 61.342(e) the permittee that aggregates or mixes individual waste streams as defined in 61.348(a)(5) for management and treatment in a wastewater treatment system shall comply with the following requirements:

(a) [61.348(b)(1)]
The permittee shall design and operate each waste management unit that comprises the wastewater treatment system in accordance with the appropriate standards specified in 40 CFR 61.343 through 61.347 [see sections A.II. and A.III].

(b) [61.348(b)(2)]
The provisions of 40 CFR 61.348(b)(1) do not apply to any waste management unit that the permittee demonstrates to meet the following conditions initially and, thereafter, at least once per year:

(i) [61.348(b)(2)(i)]
The benzene content of each waste stream entering the waste management unit is less than 10 ppmw on a flow-weighted annual average basis as determined by the procedures specified in 40 CFR 61.355(c) [see section A.V]; and

(ii) [61.348(b)(2)(ii) and (b)(2)(ii)(A) and (b)(2)(ii)(B)]
The total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units comprising the facility wastewater treatment systems is less than 1 Mg/yr (1.1 ton/yr) For this determination, total annual benzene quantity shall be calculated as follows:

(aa) The total annual benzene quantity shall be calculated as the sum of the individual benzene quantities determined at each location where a waste stream first enters an exempt waste management unit. The benzene quantity discharged from an exempt waste management unit shall not be included in this calculation.

(bb) The annual benzene quantity in a waste stream managed or treated in an enhanced biodegradation unit shall not be included in the calculation of the total annual benzene quantity, if the enhanced biodegradation unit is the first exempt unit in which the waste is managed or treated. A unit shall be considered enhanced biodegradation if it is a suspended-growth process that generates biomass, uses recycled biomass, and periodically removes biomass from the process. An enhanced biodegradation unit typically operates at a food-to-microorganism ratio in the range of 0.05 to 1.0 kg of biological oxygen demand per kg of biomass per day, a mixed liquor suspended solids ratio in the range of 1 to 8 grams per liter, and a residence time in the range of 3 to 36 hours.

iii. [61.348(c)]
The permittee shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in 40 CFR 61.348(d), achieves the appropriate conditions specified in 40 CFR 61.348(a) or (b) in accordance with the following requirements:

(a) [61.348(c)(1)]
Engineering calculations in accordance with requirements specified in 40 CFR 61.356(e) [see section A.III]; or

(b) [61.348(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 [see section A.V].

iv. [61.348(d)]
A treatment process or waste stream is in compliance with the requirements of 40 CFR 61 Subpart FF and exempt from the requirements of paragraph (c) of 40 CFR 61.348 provided that the permittee documents that the treatment process or waste stream is in compliance with other regulatory requirements as follows:

(a) [61.348(d)(1)]
The treatment process is a hazardous waste incinerator for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 264, Subpart O;

(b) [61.348(d)(2)]
The treatment process is an industrial furnace or boiler burning hazardous waste for energy recovery for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 266, Subpart D;

(c) [61.348(d)(3)]

The waste stream is treated by a means or to a level that meets benzene-specific treatment standards in accordance with the Land Disposal Restrictions under 40 CFR Part 268, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349;

(d) [61.348(d)(4)]
The waste stream is treated by a means or to a level that meets benzene-specific effluent limitations or performance standards in accordance with the Effluent Guidelines and Standards under 40 CFR Parts 401-464, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349; or

(e) [61.348(d)(5)]
The waste stream is discharged to an underground injection well for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 122.

v. [61.348(e)]
Except as specified in 40 CFR 61.348(e)(3), if the treatment process or wastewater treatment system unit has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.

(a) [61.348(e)(3)]
If the cover and closed-vent system operate such that the treatment process and wastewater treatment system unit are maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(i) [61.348(e)(3)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) [61.348(e)(3)(ii)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V]; and

(iii) [61.348(e)(3)(iii)]

The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.

vi. [61.348(f)]
Except for treatment processes complying with 40 CFR 61.348(d), the Administrator may request at any time a permittee demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in 40 CFR 61.348(a) or 61.348(b) by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355(h) [see section A.V].

j. [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

k. [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.

l. [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.

m. [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)(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.

v. [60.692-2(d)]
Except as provided in paragraph (e) of 40 CFR 60.692, each modified or reconstructed individual drain system that has a catch basin in the existing configuration prior to May 4, 1987 shall be exempt from the provisions 40 CFR 60.692-2.

vi. [60.692-2(e)]
Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin.

c. [60.692-3] STANDARDS: Oil-water separators - 40 CFR Part 60, Subpart QQQ

i. [60.692-3(a)]
Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of 40 CFR Part 60, Subpart QQQ 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)(1)]
Each modified or reconstructed oil-water separator tank with a maximum design capacity to treat less than 38 liters per second (600 gpm) of refinery wastewater which was equipped and operated with a fixed roof covering the entire separator tank or a portion of the separator tank prior to May 4, 1987 shall be exempt from the requirements of 40 CFR 60.692-3(b), but shall meet the requirements of 40 CFR 60.692-3(a), or may elect to comply with 40 CFR 60.692-3(c)(2).

iv. [60.692-3(c)(2)]
The permittee may elect to comply with the requirements of 40 CFR 60.692-3(a) for the existing fixed roof covering a portion of the separator tank and comply with the requirements for floating roofs in 40 CFR 60.693-2 for the remainder of the separator tank.

v. [60.692-3(d)]
Storage vessels, including slop oil tanks and other auxiliary tanks that are subject to the requirements of 40 CFR Part 60, Subparts K, Ka, or Kb, are not subject to the requirements of 40 CFR 60.692-3.

vi. [60.692-3(e)]
Slop oil from an oil-water separator tank and oily wastewater from slop oil handling equipment shall be collected, stored, transported, recycled, reused, or disposed of in an enclosed system. Once slop oil is returned to the process unit or is disposed of, it is no longer within the scope of 40 CFR Part 60, Subpart QQQ. Equipment used in handling slop oil shall be equipped with a fixed roof meeting the requirements of 40 CFR 60.692-3(a).

vii. [60.692-3(f)]
Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment that is required to comply with 40 CFR 60.692-3(a), and not 40 CFR 60.692-3(b), may be equipped with a pressure control valve as necessary for proper system operation. The pressure control valve shall be set at the maximum pressure necessary for proper system operation, but such that the value will not vent continuously.

d. [60.692-4] Standards: Aggregate facility - 40 CFR Part 60, Subpart QQQ
A new, modified, or reconstructed aggregate facility shall comply with the requirements of 40 CFR 60.692-2 and 60.692-3.

e. [60.692-5] Standards: Closed vent systems and control devices - 40 CFR Part 60, Subpart QQQ

i. [60.692-5(a)]
Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C (1,500°F).

ii. [60.692-5(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

iii. 40 CFR 60.692-5(c)
Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.

iv. [60.692-5(d)]
Closed vent systems and control devices used to comply with provisions of 40 CFR Part 60, Subpart QQQ 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 40 CFRPart 60, Subpart QQQ cannot be achieved without a refinery or process unit shutdown.

ii. [60.692-7(b)]
Installation of equipment necessary to comply with the provisions of 40 CFR Part 60, Subpart QQQ shall occur no later than the next scheduled refinery or process unit shutdown.

g. [60.693-1] Alternative standards for individual drain systems.

i. [60.693-1(a)]
The permittee may elect to construct and operate a completely closed drain system.

ii. [60.693-1(b)]
Each completely closed drain system shall be equipped and operated with a closed vent system and control device complying with the requirements of 40 CFR 60.692-5.

iii. [60.693-1(c)]
The permittee must notify the Administrator in the report required in 40 CFR 60.7 that the permittee has elected to construct and operate a completely closed drain system.

iv. [60.693-1(d)]
If the permittee elects to comply with the provisions of 40 CFR 60.693-1, then the permittee does not need to comply with the provisions of 40 CFR 60.692-2 or 60.694.

v. [60.693-1(e)(e)(1)]
Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

h. [60.693-2] Alternative standards for oil-water separators.

i. [60.693-2(a)]
The permittee may elect to construct and operate a floating roof on an oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of 40 CFR Part 60, Subpart QQQ 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. [63.654(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]. 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.III., referencing 40 CFR Part 63, Subpart CC.

2. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations Monitoring Requirements

a. [61.343] STANDARDS: TANKS

i. [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].

ii. [61.343(a)(1)(i)(C)]
When operating a tank under negative atmospheric pressure with an opening not sealed and kept closed at all times as described under 40 CFR 61.343(a)(1)(i)(C) [see section III.A.II.2]:

(a) [61.344(a)(1)(i)(C)(2)
the opening shall be operated 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,

(b) [61.344(a)(1)(i)(C)(3)]
the pressure shall be monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

iii. [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.

iv. [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(a)(1)(i)]
Each surface impoundment cover shall meet the following requirements.

(a) [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].

(b) [61.344(a)(1)(i)(C)]
When operating with a surface impoundment under negative atmospheric pressure with an opening not sealed and kept closed at all times as described under 40 CFR 61.344(a)(1)(i)(C) [see section III.A.II.2]:

(i) [61.344(a)(1)(i)(C)(2)
the opening shall be operated 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,

(ii) [61.344(a)(1)(i)(C)(3)]
the pressure shall be monitored continuously to ensure that the pressure in the enclosure of the surface impoundment remains below atmospheric pressure.

ii. [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.

iii. [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(a)(1)(i)]
The cover and all openings (e.g., bungs, hatches, and sampling ports) on each container used to handle, transfer, or store waste 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].

ii. [61.345(a)(3)(ii)(A)]
If a total enclosure is used as air emission control equipment for treatment of waste in a container, then 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.

iii. [61.345(a)(3)(ii)(C)]
When a cover is used for control of air emissions, 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].

iv. [61.345(a)(4)(ii)]
When operating with the container under negative atmospheric pressure with an opening not sealed and kept closed at all times as described under 40 CFR 61.345(a)(4) [see section III.A.II.2]:

(a) the opening shall be operated 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,

(b) [61.345(a)(4)(iii)]
the pressure shall be monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.

v. [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.

vi. [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)(1)(i)]
The cover on each drain system opening shall meet the following requirements.

(a) [61.346(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V].

(b) [61.346(a)(1)(i)(C)]
When operating with individual drain system under negative atmospheric pressure with an opening not sealed and kept closed at all times as described under 40 CFR 61.346(a)(1)(i)(C) [see section III.A.II.2]:

(i) [61.346(a)(1)(i)(C)(2)]
the opening shall be operated 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,

(ii) [61.346(a)(1)(i)(C)(3)]
the pressure shall be monitored continuously to ensure that the pressure in the enclosure of the individual drain system remains below atmospheric pressure.

ii. [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.

iii. [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.

iv. [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(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) for each oil-water separator in which waste is placed in accordance with 40 CFR 61.342(c)(i)(ii) [see section A.II.2] 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)(C)]
When operating an oil-water separator under negative atmospheric pressure with an opening not sealed and kept closed at all times as described under 40 CFR 61.347(a)(1)(i)(C) [see section III.A.II.2]:

(a) [61.347(a)(1)(i)(C)(2)]
the opening shall be operated 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,

(b) [61.347(a)(1)(i)(C)(3)]

the pressure shall be monitored continuously to ensure that the pressure in the oil-water separator remains below atmospheric pressure.

iii. [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.

iv. [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(e)(3)]
When operating a treatment process or wastewater treatment system under negative atmospheric pressure with an opening not sealed and kept closed at all times as described under 40 CFR 61.348(e)(3) [see section III.A.II.2]:

(a) [61.348(e)(3)(ii)]
the opening shall be operated 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,

(b) [61.348(e)(3)(iii)]
the pressure shall be monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.

iv. [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(a)(1)]
The closed vent system shall:

(a) [61.349(a)(1)(i)]
The closed vent system 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) [see section A.V].

(b) [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.

ii. [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.

iii. [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.

iv. [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 section 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 section 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. **Carbon Canisters Monitoring for 40 CFR 61 Subpart FF compliance**

The permittee shall comply with either section A.III.3.a or A.III.3.b below at all locations where a carbon canister(s) is utilized as the control device under the Benzene Waste NESHAP (40 CFR 61.354(d)).

a. Utilizing primary and secondary carbon canisters in series:

i. The permittee shall monitor for breakthrough between the primary and secondary carbon canisters at times when there is actual flow to the carbon canister, in accordance with the frequency specified in 40 CFR 61.354(d) [see section A.III.2.i.iv].

ii. The permittee shall replace the secondary carbon canisters with fresh carbon canisters immediately when VOC breakthrough of 50 ppm is detected. The original secondary carbon canister or a new carbon canister will be used as the new primary carbon canister. For this section, "immediately" means within twenty-four (24) hours.

iii. The permittee shall maintain a supply of fresh carbon canisters at each facility at all times.

iv. Until installation of the second carbon canister all monitoring shall be conducted as specified in section A.III.3.b.

b. Utilizing single carbon canisters:

i. The permittee shall monitor for breakthrough from the carbon canisters at times when there is actual flow to the carbon canister, in accordance with the frequency specified in 40 CFR 61.354(d) [see section A.III.2.i.iv].

ii. For the single canister option, canisters will be replaced immediately when breakthrough is determined as follows:

(a) For canisters less than or equal to 55 gallon drum size, breakthrough is any reading of VOC above background;

(b) For canisters larger than 55 gallons, breakthrough is defined as either:

(i) 50 ppm VOC; or

(ii) 1 ppm benzene. To use 1 ppm benzene, canisters must be monitored for VOC. When a reading of 10 ppm VOC is detected, monitoring for benzene must be conducted on the following schedule:

Daily if the historical replacement interval is two weeks or less, or

Monday, Wednesday and Friday, if the historical replacement interval is greater than two weeks.

iii. For purposes of section A.III.3.b, the term "immediately" shall be defined to mean: within eight (8) hours for canisters with historical replacement intervals of two weeks or less; or within twenty-four (24) hours for canisters with a historical replacement interval of more than two weeks.

iv. The permittee shall maintain a supply of fresh carbon canisters at each facility at all times.

v. Single carbon canisters can be replaced with a dual system at any time provided US EPA is notified and single canister monitoring is continued until the second canister is installed.

c. Records for sections A.III.3.a and A.III.3.b shall be maintained in accordance with 40 CFR 61.356(j)(10) [see section A.III.2.j.x.(j)].

4. Monitoring Requirement for OAC rule 3745-21-09

a. [OAC rule 3745-21-09(M)(2)]
Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall check all covers and forebay and separator sections by visual inspections quarterly to ensure that they are equipped with lids and seals that are kept in a closed position at all times except when in actual use.

b. [OAC rule 3745-21-09(UU)(4)]
The permittee shall collect and record the following information each day: the operating times for the capture (collection) system, control device, and the crude desalter.

5. 40 CFR Part 60, Subpart QQQ Monitoring & Record keeping Requirements

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. [60.692-5(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].

d. [60.692-6] Standards: Delay of repair

i. [60.692-6(a)]
Delay of repair of facilities that are subject to the provisions of 40 CFR Part 60, Subpart QQQ 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.

e. [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.

f. [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.

(b) [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.

g. [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.

h. [60.697] Record keeping requirements - 40 CFR Part 60, Subpart QQQ

i. [60.697(a)]
Each permittee of a facility subject to the provisions of 40 CFR Part 60, Subpart QQQ shall comply with the record keeping requirements of 40 CFR 60.697. All records shall be retained for a period of 2 years after being recorded unless otherwise noted.

ii. [60.697(b)(1)]
For individual drain systems subject to 40 CFR 60.692-2 [see section A.II], the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.

iii. [60.697(b)(2)]
For junction boxes subject to 40 CFR 60.692-2 [see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-2(b) [see section A.III] when a broken seal, gap, or other problem is identified that could result in VOC emissions.

iv. [60.697(b)(3)]
For sewer lines subject to 40 CFR 60.692-2 and 60.693-1(e) [see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-2(c) and 60.693-1(e) [see section A.III] when a problem is identified that could result in VOC emissions.

v. [60.697(c)]
For oil-water separators subject to 40 CFR 60.692-3 [see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-3(a) [see section A.III] when a problem is identified that could result in VOC emissions.

vi. [60.697(d)]
For closed vent systems subject to 40 CFR 60.692-5 [see section A.II] and completely closed drain systems subject to 40 CFR 60.693-1[see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-5(e) [see section A.III] during which detectable emissions are measured or a problem is identified that could result in VOC emissions.

vii. [60.697(e)(1)]
If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.

(a) [60.697(e)(2)]
The reason for the delay as specified in 40 CFR 60.692-6 [see section A.III] shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.

(b) [60.697(e)(3)]
The signature of the permittee (or designee) whose decision it was that repair could not be effected without refinery or process shutdown shall be recorded.

(c) [60.697(e)(4)]
The date of successful repair or corrective action shall be recorded.

viii. [60.697(f)(1)]
A copy of the design specifications for all equipment used to comply with the provisions of 40 CFR Part 60, Subpart QQQ 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 second 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.

(aa) [60.697(f)(3)(x)(A)]
Each permittee of an affected facility that uses a carbon adsorber which is regenerated directly onsite shall maintain continuous records of the volatile organic compound concentration level or reading of organic 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 volatile organic compound concentration level or reading of organics in the exhaust gases, or inlet ad outlet gas stream, is more than 20 percent greater the design exhaust gas concentration level, and shall keep such records for 2 years after the information is recorded.

(bb) [60.697(f)(3)(x)(B)]
If a carbon adsorber that is not regenerated directly onsite in the control device is used, then the owner or operator shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.

x. [60.697(g)]
If the permittee elects to install a tightly sealed cap or plug over a drain that is out of active service, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which indicate the location of such drains.

xi. [60.697(h)]
For stormwater sewer systems subject to the exclusion in 40 CFR 60.692-1(d)(1) [see section A.II], the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that no wastewater from any process units or equipment is directly discharged to the stormwater sewer system.

xii. [60.697(i)]
For ancillary equipment subject to the exclusion in 40 CFR 60.692-1(d)(2) [see section A.II], the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which demonstrate that the ancillary equipment does not come in contact with or store oily wastewater.

xiii. [60.697(j)]
For non-contact cooling water systems subject to the exclusion in 40 CFR 60.692-1(d)(3) [see section A.II], the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that the cooling water does not contact hydrocarbons or oily wastewater and is not recirculated through a cooling tower.

xiv. [60.697(k)]
For oil-water separators subject to 40 CFR 60.693-2 [see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.693-2(a)(1)(iii)(A) and (B) [see section A.III], and shall be maintained for the time period specified in paragraphs (k)(1) and (2) 40 CFR 60.697.

(a) [60.697(k)(1)]
For inspections required by 40 CFR 60.693-2(a)(1)(iii)(A) [see section A.III], ten years after the information is recorded.

(b) [60.697(k)(2)]
For inspections required by 40 CFR 60.693-2(a)(1)(iii)(B) [see section A.III], two years after the information is recorded.

6. General Record Keeping Requirements

The permittee shall maintain files of all information (including all reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart CC

a. [63.654(a)]
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]. There are no additional reporting and record keeping requirements for wastewater under 40 CFR Part 63, Subpart CC unless a wastewater stream is included in an emissions average.

b. Miscellaneous Process Vents
See the applicable sections in Part II for miscellaneous process vents in A.IV., referencing 40 CFR Part 63, Subpart CC.

2. [61.357] REPORTING REQUIREMENTS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.357(a)]
The permittee shall submit to the Administrator by the initial startup for a new source, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 [see section A.II] and is determined by the procedures specified in 40 CFR 61.355(c) [see section A.V] to contain benzene. The report shall include the following information:

i. [61.357(a)(1)]
Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a) [see section A.V].

ii. [61.357(a)(2)]
A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements 40 CFR Part 61, Subpart FF.

iii. [61.357(a)(3)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the following information shall be added to the table:

(a) [61.357(a)(3)(i)]
Whether or not the water content of the waste stream is greater than 10 percent;

(b) [61.357(a)(3)(ii)]
Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(c) [61.357(a)(3)(iii)]
Annual waste quantity for the waste stream;

(d) [61.357(a)(3)(iv)]
Range of benzene concentrations for the waste stream;

(e) [61.357(a)(3)(v)]
Annual average flow-weighted benzene concentration for the waste stream; and

(f) [61.357(a)(3)(vi)]
Annual benzene quantity for the waste stream.

iv. [61.357(a)(4)]
The information required in paragraphs 40 CFR 61.357(a)(1), (2), and (3) should represent the waste stream characteristics based on current configuration and operating conditions. The permittee only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a) of Subpart A.

b. [61.357(b)]
If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit a report to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

c. [61.357(c)]

If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 is not changed in the following year, the permittee may submit a statement to that effect.

d. [61.357(d)]
If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 tons/yr), then the permittee shall submit to the Administrator the following reports:

i. [61.357(d)(1)]
By the date of initial startup for a new source, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this subpart.

ii. [61.357(d)(2)]
By December 30 of each year, the permittee shall submit annually to the Administrator, a report that updates the information listed in 40 CFR 61.357(a)(1) through (a)(3) If the information in the annual report required by 40 CFR 61.357(a)(1) through (a)(3) is not changed in the following year, the permittee may submit a statement to that effect.

iii. [61.357(d)(3)]
If the permittee elects to comply with the requirements of 40 CFR 61.342(c)(3)(ii) [see section A.II], then the report required by 40 CFR 61.342(d)(2) [see section A.IV] shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.

iv. [61.357(d)(4)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(d), then the permittee shall include in the report required by paragraph (d)(2) of 40 CFR 61.357 a table presenting the following information for each process wastewater stream:

(a) [61.357(d)(4)(i)]
Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF;

(b) [61.357(d)(4)(ii)]
For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part

61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(c) 40 CFR 61.357(d)(4)(iii)
For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

v. [61.357(d)(5)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(e), then the report required by paragraph (d)(2) of 40 CFR 61.357 shall include a table presenting the following information for each waste stream:

(a) [61.357(d)(5)(i)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(b) 40 CFR 61.357(d)(5)(ii)
For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the applicable location described in 40 CFR 61.355(k)(2): Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

vi. [61.357(d)(6)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR Part 61, Subpart FF.

vii. [61.357(d)(7)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator that includes:

(a) [61.357(d)(7)(i)]

If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(1) [see section A.III], then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

(b) [61.357(d)(7)(ii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(2) [see section A.III], then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.

(c) [61.357(d)(7)(iii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(b) [see section A.III], then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr (1.1 ton/yr).

(d) [61.357(d)(7)(iv)]
For a control device monitored in accordance with 40 CFR 61.354(c) [see section A.III], each period of operation monitored during which any of the following conditions occur, as applicable to the control device:

(i) [61.357(d)(7)(iv)(A)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(ii) [61.357(d)(7)(iv)(B)]
Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design gas stream temperature, and any 3-hour period during which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the design temperature difference.

(iii) [61.357(d)(7)(iv)(C)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a boiler or

process heater having a design heat input capacity less than 44 MW (150 x 10^6 Btu), as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(iv) [61.357(d)(7)(iv)(D)]
Each 3-hour period of operation during which the average concentration of organics or the average concentration of benzene in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design concentration level of organics or benzene in the exhaust gas.

(v) [61.357(d)(7)(iv)(E)]
Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(vi) [61.357(d)(7)(iv)(F)]
Each period in which the pilot flame of a flare is absent.

(vii) [61.357(d)(7)(iv)(G)]
Each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone of a boiler or process heater as required by 40 CFR 61.349(a)(2)(i)(C) [see section A.II].

(viii) [61.357(d)(7)(iv)(H)]
Each occurrence when the carbon in a carbon adsorber system that is regenerated directly on site in the control device is not regenerated at the predetermined carbon bed regeneration time.

(ix) [61.357(d)(7)(iv)(I)]
Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in 40 CFR 61.354(c) [see section A.III].

(x) [61.357(d)(7)(iv)(J)]
Each 3-hour period of operation during which the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C) [see section A.II], or any other periods specified by the Administrator of U.S. EPA for a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv).

(e) [61.357(d)(7)(v)]
For a cover and closed-vent system monitored in accordance with 40 CFR 61.354(g), the permittee shall submit a report quarterly by March 30, June 30, September 30, and December 30 quarterly to the Administrator that identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure.

viii. [61.357(d)(8)]
By December 30 of each year, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 [see section A.III] during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

e. [61.357(e)]
The permittee electing to comply with the provisions of 40 CFR 61.351 [see section A.II] or 40 CFR 61.352 shall notify the Administrator of the alternative standard selected in the report required under 40 CFR 61.07 or 61.10.

f. [61.357(f)]
The permittee who elects to install and operate the control equipment in 61.351 [see section A.II] shall comply with the reporting requirements in 40 CFR 60.115b.

g. [61.367(g)]
If the permittee elects to install and operate the control equipment in 40 CFR 61.352 [see section A.II], then the permittee shall submit initial and quarterly reports that identify all seal gap measurements, as required in 40 CFR 60.693-2(a) [see section A.III], that are outside the prescribed limits.

3. Deviation Reporting Requirements for OAC rule 3745-21-09

a. [OAC rule 3745-21-09(M)(2)]
Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall submit deviation (excursion reports) that identify all occurrences where covers, forebay and other separator sections were not equipped with lids, seals, or kept in a closed position except when in actual use., the permittee shall check all covers and forebay and separator sections by visual inspections quarterly to ensure that they are equipped with lids and seals that are kept in a closed position at all times except when in actual use. These reports shall be submitted quarterly to the Toledo Division of Environmental Services by January 30, April 30, July 30 and October 30 of each year and shall cover the previous calendar quarter. If no deviations occurred during the quarter the permittee shall submit a statement that no deviations occurred during the calendar quarter.

b. [OAC rule 3745-21-09(UU)(4)]

The permittee shall submit semi-annual deviation (excursion) reports of: any periods in which the capture (collection) system and/or control device was not in operation while the crude desalter was in operation.

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

These reports shall be submitted semi-annually i.e., by January 30 and July 30 of each year, and shall cover the previous six calendar months.

4. [60.698] Reporting requirements - 40 CFR Part 60, Subpart QQQ

a. [60.698(a)]
The permittee electing to comply with the provisions of 40 CFR 60.693 shall notify the Administrator of the alternative standard selected in the report required in 40 CFR 60.7.

b. [60.698(b)(1)]
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.

(a) [60.698(d)(3)(i)]
Each 3-hour period of operation during which the average volatile organic compound concentration level or reading of organics in the exhaust gases from a carbon adsorber which is regenerated directly onsite is more than 20 percent greater than the design exhaust gas concentration level or reading.

(b) [60.698(d)(3)(ii)]
Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly onsite in the control device is not replaced at the predetermined interval specified in 40 CFR 60.695(a)(3)(ii).

f. [60.698(e)]
If compliance with the provisions of 40 CFR Part 60, Subpart QQQ is delayed pursuant to 40 CFR 60.692-7 [see section A.II], the notification required under 40 CFR 60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or process unit shutdown.

5. General Reporting Requirements

a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Toledo Division of Environmental Services; and, Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

c. If Ohio EPA 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, then 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. [61.343(e)]
If the permittee controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device, then the permittee must meet the requirements specified in paragraphs (e)(1) through (4) of 40 CFR 61.343(e).

   a. [61.343(e)(1)]
   The tank must be located inside a total enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The permittee must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements 40 CFR 264.1084(i) or 40 CFR 265(i)is not required to make repeat demonstrations of initial and continuous compliance for the purposes of 40 CFR Part 61, Subpart FF.

4. [61.345(a)(3)(ii)(A)]
If a total enclosure is used as air emission control equipment for treatment of waste in a container, then 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.

5. [61.355] TEST METHODS, PROCEDURES, AND COMPLIANCE PROVISIONS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.355(a)]
The permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

i. [61.355(a)(1)]
For each waste stream subject to 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); and
C_i = Measured concentration of benzene in waste sample i, ppmw.

d. [61.355(d)]
A permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(i) [see section A.II] shall measure the flow-weighted annual average benzene concentration of the waste stream exiting the treatment process by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3) The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

e. [61.355(e)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(ii) [see section A.II] shall determine the percent reduction of benzene in the waste stream on a mass basis by the following procedure:

i. [61.355(e)(1)]
The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

ii. [61.355(e)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(e)(3)]
The mass flow rate of benzene entering the treatment process (E_b) shall be determined by computing the product of the flow rate of the waste stream entering the treatment process, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene entering the treatment process is calculated as follows:

$$E_b = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

where:

E_b = Mass flow rate of benzene entering the treatment process, kg/hour;
K = Density of the waste stream, kg/m^3 (lb/ft^3);
V_i = Average volume flow rate of waste entering the treatment process during each run i, m^{3}hour (ft^3);
C_i = Average concentration of benzene in the waste stream entering the treatment process during each run i, ppmw;
n = Number of runs; and
10^6 = Conversion for ppmw.

iv. [61.355(e)(4)]
The mass flow rate of benzene exiting the treatment process (E_a) shall be determined by computing the product of the flow rate of the waste stream exiting the treatment process, as determined by the outlet flow meter or the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over the same 3-hour period at which the mass flow rate of benzene entering the treatment process is determined. The mass flow rate of benzene exiting the treatment process is calculated as follows:

$$E_a = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

where:

E_a = Mass flow rate of benzene exiting the treatment process, kg/hour (lb/hr);
K = Density of the waste stream, kg/m^3 (lb/ft^3);
V_i = Average volume flow rate of waste exiting the treatment process during each run i, m^3/hour (ft^3/hr);
C_i = Average concentration of benzene in the waste stream exiting the treatment process during each run i, ppmw;
n = Number of runs; and
10^6 = Conversion factor for ppmw.

f. [61.355(f)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(iii) [see section A.II] shall determine the benzene destruction efficiency for the combustion unit by the following procedure:

i. [61.355(f)(1)]
The test shall be conducted under conditions that exist when the combustion unit is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(f)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(f)(3)]
The mass flow rate of benzene entering the combustion unit shall be determined by computing the product of the flow rate of the waste stream entering the combustion unit, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling procedures in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene into the combustion unit is calculated as follows:

$$E_b = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

where:

E_b = Mass flow rate of benzene into the combustion unit, kg/hour (lb/hr);
K = Density of the waste stream, kg/m^3 (lb/ft^3);

V_i = Average volume flow rate of waste entering the combustion unit during each run i, m^3/hour (ft^3/hr);
C_i = Average concentration of benzene in the waste stream entering the combustion unit during each run i, ppmw;
n = Number of runs; and
10^6 = Conversion for ppmw.

iv. [61.355(f)(4)]
The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:

(a) [61.355(f)(4)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected and be the same time period at which the mass flow rate of benzene entering the treatment process is determined. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample and each 1-hour period shall correspond to the periods when the waste feed is sampled.

(b) [61.355(f)(4)(ii)]
A run shall consist of a 1-hour period during the test. For each run:

(i) [61.355(f)(4)(ii)(A)]
The reading from each measurement shall be recorded;

(ii) [61.355(f)(4)(ii)(B)]
The volume exhausted shall be determined using method 2, 2A, 2C, or 2D from Appendix A of 40 CFR Part 60, as appropriate; and

(iii) [61.355(f)(4)(ii)(C)]
The average benzene concentration in the exhaust downstream of the combustion unit shall be determined using method 18 from Appendix A of 40 CFR Part 60.

(c) [61.355(f)(4)(iii)]
The mass of benzene emitted during each run shall be calculated as follows:

$$M_i = D_b V C(10^{-6})$$

where:

M_i = Mass of benzene emitted during run i, kg (lb);
V = Volume of air-vapor mixture exhausted at standard conditions, m^3 (ft^3);

C = Concentration of benzene measured in the exhaust, ppmv;
D_b = Density of benzene = 3.24 kg/m^3 (0.202 lb/ft^3); and
10^{-6} = Conversion factor for ppmv.

(d) [61.355(f)(4)(iv)]
The benzene mass emission rate in the exhaust shall be calculated as follows:

$$E_a = (\sum_{i=1}^{n} M_i) / T$$

where:

E_a = Mass flow rate of benzene emitted, kg/hour lb/hr);
M_i = Mass of benzene emitted during run i, kg (lb);
T = Total time of all runs, hour; and
n = Number of runs.

v. [61.355(f)(5)]
The benzene destruction efficiency for the combustion unit shall be calculated as follows:

$$R = (E_b - E_a) / E_b \times 100$$

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); and
E_a = Mass flow of benzene from the combustion unit, kg/hour (lb/hr).

g. [61.355(g)]
A permittee using performance tests to demonstrate compliance of a wastewater treatment system unit with 61.348(b) [see section A.II] shall measure the flow-weighted annual average benzene concentration of the wastewater stream where the waste stream enters an exempt waste management unit by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3) The test shall be conducted under conditions that exist when the wastewater treatment system is operating at the highest inlet wastewater stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

h. [61.355(h)]

The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 through 61.347 and 61.349 [see sections A.II and A.III] in accordance with the following requirements:

i. [61.355(h)(1)]
Monitoring shall comply with Method 21 from Appendix A of 40 CFR Part 60.

ii. [61.355(h)(2)]
The detection instrument shall meet the performance criteria of Method 21.

iii. [61.355(h)(3)]
The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. [61.355(h)(4); (h)(4)(i) and (4)(ii)]
Calibration gases shall be with zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

v. [61.355(h)(5)]
The background level shall be determined as set forth in Method 21.

vi [61.355(h)(6)]
The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. [61.355(h)(7)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

i. [61.355(i)]
A permittee using a performance test to demonstrate compliance of a control device with either the organic reduction efficiency requirement or the benzene reduction efficiency requirement specified under 40 CFR 61.349(a)(2) [see section A.II] shall use the following procedures:

i. [61.355(i)(1)]
The test shall be conducted under conditions that exist when the waste management unit vented to the control device is operating at the highest load or capacity level expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(i)(2)]

Sampling sites shall be selected using Method 1 or 1A from 40 CFR Part 60, Appendix A, as appropriate.

iii. [61.355(i)(3)]
The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:

(a) [61.355(i)(3)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected. Samples of the vent stream entering and exiting the control device shall be collected during the same time period. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample.

(b) [61.355(i)(3)(ii) and (i)(3)(ii)(A) through (C)]
A run shall consist of a 1-hour period during the test. For each run:

(i) The reading from each measurement shall be recorded;

(ii) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from 40 CFR Part 60, Appendix A, as appropriate;

(iii) The organic concentration or the benzene concentration, as appropriate, in the vent stream entering and exiting the control shall be determined using Method 18 from 40 CFR Part 60, Appendix A.

(c) [61.355(i)(3)(iii)]
The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:

$$M_{aj} = (K_1 V_{aj}) / 10^6) \times (\sum_{i=1}^{n} C_{ai} MW_i)$$

$$M_{bj} = (K_1 V_{bj}) / 10^6) \times (\sum_{i=1}^{n} C_{bi} MW_i)$$

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); and
10^{-6} = Conversion factor for ppmv.

(d) [61.355(i)(3)(iv)]
The mass flow rate of organics or benzene entering and exiting the control device shall be calculated using as follows:

$$E_a = (\sum_{j=1}^{n} M_{aj}) / T$$

$$E_b = (\sum_{j=1}^{n} M_{bj}) / T$$

where:

E_a = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr);
E_b = Mass flow rate of organics or benzene exiting the control device, kg/hr (lb/hr);
M_{aj} = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb);
M_{bj} = Mass of organics or benzene in vent stream exiting the control device during run j, kg (lb);
T = Total time of all runs, hour; and
n = Number of runs.

iv. [61.355(i)(4)]
The organic reduction efficiency for the control device shall be calculated as follows:

$$R = (E_a - E_b) / E_a$$

where:

R = Total organic reduction efficiency or benzene reduction efficiency for the control device, percent;
E_b = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr); and
E_a = Mass flow rate of organics or benzene emitted from the control device, kg/hr (lb/hr).

j. [61.355(j)]
A permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(c)(3)(ii)(B) [see section A.II], according to the provisions of 40 CFR 61.355(a) [see section A.V], except that the procedures in 40 CFR 61.355(a) shall also apply to wastes with a water content of 10 percent or less.

k. [61.355(k)]
The permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [see section A.II] by the following procedure:

i. [61.355(k)(1)]
For each waste stream that is not controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a), as applicable to the waste management unit that manages the waste, the benzene quantity shall be determined as specified in paragraph (a) of 40 CFR 61.355, except that paragraph (b)(4) of 40 CFR 61.355 shall not apply, i.e., the waste quantity for process unit turnaround waste is not annualized but shall be included in the determination of benzene quantity for the year in which the waste is generated for the purposes of the calculation required by 40 CFR 61.342(e)(2).

ii. [61.355(k)(2)]
For each waste stream that is controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a) [see section A.II], as applicable to the waste management unit that manages the waste, the determination of annual waste quantity and flow-weighted annual average benzene concentration shall be made at the first applicable location as described in paragraphs (k)(2)(i), (k)(2)(ii), and (k)(2)(iii) of 40 CFR 61.355 and prior to any reduction of benzene concentration through volatilization of the benzene, using the methods given in (k)(2)(iv) and (k)(2)(v) of 40 CFR 61.355.

(a) [61.355(k)(2)(i)]
where the waste stream enters the first waste management unit not complying with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a) that are applicable to the waste management unit;

(b) [61.355(k)(2)(ii)]
For each waste stream that is managed or treated only in compliance with 40 CFR 61.343 through 61.348(a) up to the point of final direct discharge from the facility, the determination of benzene quantity shall be prior to any reduction of benzene concentration through volatilization of the benzene; or

(c) [61.355(k)(2)(iii)]
For wastes managed in units controlled for air emissions in accordance with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a), and then transferred offsite, facilities shall use the first applicable offsite location as described in paragraphs (k)(2)(i) and (k)(2)(ii) of 40 CFR 61.355 if they have documentation from the offsite facility of the benzene quantity at this location. Facilities without this documentation for offsite wastes shall use the benzene quantity determined at the point where the transferred waste leaves the facility.

(d) [61.355(k)(2)(iv)]
Annual waste quantity shall be determined using the procedures in paragraphs (b)(5), (6), or (7) of 40 CFR 61.355; and

(e) [61.355(k)(2)(v)]
The flow-weighted annual average benzene concentration shall be determined using the procedures in paragraphs (c)(2) or (3) of 40 CFR 61.355.

iii. [61.355(k)(3)]
The benzene quantity in a waste stream that is generated less than one time per year, including process unit turnaround waste, shall be included in the determination of benzene quantity as determined in paragraph (k)(6) of 40 CFR 61.355 for the year in which the waste is generated. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste for purposes of determining benzene quantity as determined in paragraph (k)(6) of 40 CFR 61.355.

iv. [61.355(k)(4)]
The benzene in waste entering an enhanced biodegradation unit, as defined in 40 CFR 61.348(b)(2)(ii)(B) [see section A.II], shall not be included in the determination of benzene quantity, determined in paragraph (k)(6) of 40 CFR 61.355, if the following conditions are met:

(a) [61.355(k)(4)(i)]
The benzene concentration for each waste stream entering the enhanced biodegradation unit is less than 10 ppmw on a flow-weighted annual average basis; and

(b) [61.355(k)(4)(ii)]

All prior waste management units managing the waste comply with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347 and 61.348(a) [see section A.II].

v. [61.355(k)(5)]
The benzene quantity for each waste stream in paragraph (k)(2) of 40 CFR 61.355 shall be determined by multiplying the annual waste quantity of each waste stream times its flow-weighted annual average benzene concentration.

vi. [61.355(k)(6)]
The total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [see section A.II] shall be determined by adding together the benzene quantities determined in paragraphs (k)(1) and (k)(5) of 40 CFR 61.355 for each applicable waste stream.

vii. [40 CFR 61.355(k)(7)]
If the benzene quantity determined in paragraph (6) of 40 CFR 61.355 exceeds 6.0 Mg/yr (6.6 ton/yr) only because of multiple counting of the benzene quantity for a waste stream, the permittee may use the following procedures for the purposes of the calculation required by 40 CFR 61.342(e)(2) [see section A.II]:

(a) [61.355(k)(7)(i)]
Determine which waste management units are involved in the multiple counting of benzene;

(b) [61.355(k)(7)(ii)]
Determine the quantity of benzene that is emitted, recovered, or removed from the affected units identified in paragraph (k)(7)(i) of 40 CFR 61.355, or destroyed in the units if applicable, using either direct measurements or the best available estimation techniques developed or approved by the Administrator of USEPA.

(c) [61.355(k)(7)(iii)]
Adjust the benzene quantity to eliminate the multiple counting of benzene based on the results from paragraph (k)(7)(ii) of 40 CFR 61.355 and determine the total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2).

(d) [61.355(k)(7)(iv)]
Submit in the annual report required under 40 CFR 61.357(a) [see section A.IV] a description of the methods used and the resulting calculations for the alternative procedure under paragraph (k)(7) of 40 CFR 61.355, the benzene quantity determination from paragraph (k)(6) of 40 CFR 61.355, and the adjusted benzene quantity determination from paragraph (k)(7)(iii) of 40 CFR 61.355.

6. 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 40 CFR Part 60, Subpart QQQ 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.

TABLE 1 **Individual Drain Systems** **Subject to 40 CFR Part 60, Subpart QQQ**			
Emissions Unit ID	**Facility Description**	**Individual Drain System Description**	**Controls**

P025	Lift station for T157, T159, and T161	Junction Box	Tight seal cover
P025	Lift station for T153-T156	Junction Box	Tight seal cover
P025	Stormwater Diversion Chamber	Junction Box	Tight seal cover and carbon canister
P028	"A" Train Diesel Hydrotreater	Drains in entire unit	Water seals
P029	"B" Train Gas Oil Hydrotreater	Drains in entire unit	Water seals
P036	Coker 3	Drains in entire unit	Water seals
P037	SRU #2 and #3	Drains in entire unit	Water seals
T153	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T154	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T155	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T156	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T157	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T159	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T161	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T163	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T164	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T166	Storage of petroleum liquids	Tank drain system	Drain/dike valve
T167	Storage of petroleum liquids	Tank drain system	Drain/dike valve

2.

Table II, Benzene Waste NESHAPs (40 CFR Part 61, Subpart FF) Affected Equipment

The Toledo refinery complies with the 6 Mg/yr option in Subpart FF [61.342(e)]. This compliance option allows the refinery some discretion on which portions of the waste water system are controlled as long as the uncontrolled total benzene quantity (as determined by procedures in 40 CFR 61.355(k)) is less than or equal to 6.0 Mg/yr. To meet this requirement, the refinery at the time of issuance of this permit, controls the following equipment in benzene waste service to the standards of 40 CFR Part 61, Subpart FF.

Affected Unit Description	Applicable Standard (Controls)
Sump #1	[61.346 - Standards: Individual Drain Systems] (Carbon Canisters)
Sump #2	[61.346 - Standards: Individual Drain Systems] (Carbon Canisters)
Sump #3	[61.346 - Standards: Individual Drain Systems] (Carbon Canisters)

T073 (PR-500084)	[40 CFR 61.351 - Alternative Standards for Tanks] (EFR in compliance with NSPS Kb standards)
T166 (PR-500014)	[40 CFR 61.351 - Alternative Standards for Tanks] (EFR in compliance with NSPS Kb standards)
T167 (PR-500015)	[40 CFR 61.351 - Alternative Standards for Tanks] (EFR in compliance with NSPS Kb standards)
2 Parallel Vacuum Benzene Strippers	[40 CFR 61.348 - Standards: Treatment Processes] (Closed vent system vented to the main hydrocarbon flare system (West & East flares). If West flare taken out of service, there is a backup tie into the SRU #1 Acid Gas Flare.)
Drain at T089 (PR-500151) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T010 (PR-500152) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T011 (PR-500153) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T016 (PR-500154) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T017 (PR-500155) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T018 (PR-500156) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T019 (PR-500157) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T044 (PR-500158) to Sump #1	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T041 (PR-500130) to Sump #2	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T040 (PR-500131) to Sump #2	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T120 (PR-500132) to Sump #2	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T084 (PR-500134) to Sump #2	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T085 (PR-500135) to Sump #2	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T035 (PR-500143) to Sump #2	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T166 (PR-500014) to Sump #6	[61.346 - Standards: Individual Drain Systems] (Water Seal)
Drain at T167 (PR-500015) to Sump #6	[61.346 - Standards: Individual Drain Systems] (Water Seal)

Note: The Oil Water Sewer API Separators do not need to meet the requirements of 40 CFR 61.347 because the refinery complies with the 40 CFR 61.342(e) (6 Mg/yr option), not 40 CFR 61.342(c).

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P028 - "A" Train Diesel Hydrotreater with blowdown emissions	OAC rule 3745-31-05(A)(3) (PTI 04-708 as modified on 8/5/1998)	22.03 tons per year volatile organic compound (VOC) emissions (from equipment leaks) See A.I.2.c and A.I.2.h.
	40 CFR Part 60, Subpart A	See section A.I.2.i.
	40 CFR Part 60, Subpart QQQ	See section A.I.2.b.
	equipment leaks 40 CFR Part 63, Subpart A	See sections A.I.2.d and A.I.2.e and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.e and A.I.2.f.
	40 CFR Part 60, Subpart GGG	See section A.I.2.a and Part II, sections A.23 through A.25.
	OAC rule 3745-21-09(T)	See section A.I.2.g.

2. Additional Terms and Conditions

2.a Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.b In accordance with 40 CFR Part 60, Subpart QQQ, the permittee shall meet the individual drain system monitoring and record keeping program as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater System). Affected facilities are outlined in Section A.VI. Table 1 of the terms and conditions for P025.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subparts A, GGG, and QQQ.

2.d 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.e Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.h The annual emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

2.i The flare shall meet the requirements of 40 CFR 60.18 (c) through (f). Refer to Part II, section A.177 of this permit for the monitoring, record keeping, reporting and testing requirements for refinery flares.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.63 through A.65 of this permit for the applicable miscellaneous process vent standards referencing 40 CFR Part 63, Subpart CC.

4. Refer to Part II, sections A.23 through A.25, and A.70 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart GGG.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e, and A.4.f of this permit for the applicable monitoring and record keeping requirements for this refinery flare.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e and A.4.f of this permit for the applicable reporting requirements for this refinery flare.

V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   Emission Limitation:

   22.03 tons per year VOC emissions from equipment leaks

   Applicable Compliance Method:

   The monitoring, record keeping and reporting requirements of A.II.1, A.III.1and A.IV.1 shall serve as demonstration of compliance with this emission limitation. The emission limit of 22.03 tons per year VOC emissions from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value

correlation, multiplied by 2.2 lbs/kg, multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per year for each type of leaking component for a total of 22.03 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

2. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

4. Refer to Part II, section A.200 of this permit for the applicable testing requirements for this refinery flare.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P029 - "B" Train Gas Oil Hydrotreater with blowdown emissions controlled by the West Flare	OAC rule 3745-31-05(A)(3) (PTI 04-708 as modified on 8/5/1998)	19.11 tons per year volatile organic compound (VOC) emissions (from equipment leaks) See sections A.I.2.c and A.I.2.h.
	40 CFR Part 60, Subpart A	See section A.I.2.i.
	40 CFR Part 60, Subpart QQQ	See section A.I.2.b.
	equipment leaks 40 CFR Part 63, Subpart A	See sections A.I.2.d and A.I.2.e and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.e and A.I.2.f and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart GGG	See section A.I.2.a and Part II, sections A.23 through A.25.
	OAC rule 3745-21-09(T)	See section A.I.2.g.

2. Additional Terms and Conditions

2.a Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.b In accordance with 40 CFR Part 60, Subpart QQQ, the permittee shall establish an individual drain system monitoring and record keeping program as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater System).

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subparts A, GGG, and QQQ.

2.d 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.e Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.h The annual emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

2.i The flare shall meet the requirements of 40 CFR 60.18 (c) through (f). Refer to Part II, section A.177 of this permit for the monitoring, record keeping, reporting, and testing requirements for refinery flares.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.160 through A.178, for the requirements of 40 CFR Part 60, Subpart A; - New Source Performance Standards General Provisions.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.63 through A.65 of this permit for the applicable miscellaneous process vent standards referencing 40 CFR Part 63, Subpart CC.

4. Refer to Part II, sections A.23 through A.25, and A.70 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart GGG.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e, and A.4.f of this permit for the applicable monitoring and record keeping requirements for this refinery flare.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.3, A.4.e and A.4.f of this permit for the applicable reporting requirements for this refinery flare.

V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   Emission Limitation:

   19.11 tons per year VOC emissions from equipment leaks

   Applicable Compliance Method:

   The emission limit of 19.11 tons per year VOC emissions from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per

year for each type of leaking component for a total of 19.11 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

2. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

3. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

4. Refer to Part II, section A.200 of this permit for the applicable testing requirements for this refinery flare.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P036 - Coker 3/ delayed petroleum coker	OAC rule 3745-21-09(T)	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on 8/5/1998)	7.38 pounds per hour of volatile organic compounds (VOC) as a rolling, 30-day average
		12.12 tons of VOC emissions per rolling, 30-day period (from coke cutting)
		10.81 tons of VOC from fugitive emissions (equipment leaks) per rolling, 12-month period
		See section A.I.2.b.
	40 CFR Part 60, Subpart GGG	See section A.I.2.c and Part II, sections A.23 through A.25.
	40 CFR Part 63, Subpart A	See sections A.I.2.d and A.I.2.e and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.e and A.I.2.f.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.g.
	40 CFR Part 60, Subpart QQQ	See section A.I.2.h.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subpart GGG.

2.c Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

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

2.e. Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f. Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II, sections A.65 through A.67 of this permit for the miscellaneous process vent provisions referencing 40 CFR Part 63, Subpart CC.

2.h The permittee shall meet the individual drain system monitoring and record keeping requirements as outlined in the terms and conditions for Emissions Unit P025 (Refinery Wastewater System). Affected facilities are listed in Section A.VI. Table 1 of the terms and conditions for emissions unit P025.

II. Operational Restrictions

1. Blowdown emissions shall be vented to the flare gas recovery system.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the hours of operation and the number of coking cycles completed each day. From this data, the permittee shall calculate and record the following emissions from coke cutting: total daily VOC emissions, hourly VOC emissions as a rolling, 30-day average, the monthly VOC emissions, and the rolling, 12-month summation of VOC emissions.

2. Emissions occurring during any malfunction, bypassing control equipment, startup or shutdown period must be quantified and recorded.

3. The permittee shall maintain records of all periods when the blowdown emissions from this emissions unit were not vented to the flare gas recovery system.

4. The permittee shall maintain monthly records of the number, type, and period of time components are determined to be leaking by the monitoring required in Part II of this permit. From this information, the permittee shall calculate and record the rolling, 12-month summation of monthly VOC emissions from equipment leaks.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports of the following deviations:

   a. all periods when emissions exceeded 7.38 pounds per hour of VOC emissions as a rolling, 30-day average (from coke cutting);

   b. all periods when emissions exceeded 12.12 tons of VOC per rolling, 12-month period (from coke cutting);

   c. all periods when emissions exceeded 10.81 tons per year of VOC as a rolling, 12-month summation (from equipment leaks); and

   d. all periods when blowdown emissions from this emissions unit were not vented to the flare gas recovery system.

   If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

   These reports shall be submitted quarterly, i.e., by January 30, April 30, July 30, and October 30 of each year, and shall cover the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   1.a Emission Limitation:

   7.38 pounds per hour of VOC emissions as a rolling, 30-day average from coke cutting

   Applicable Compliance Method:

   If required, compliance shall be determined by multiplying the emission factor of 44.28 pounds VOC per blowdown cycle by the number of blowdown cycles per 30-day period, and dividing by the hours of operation for that 30-day period.

   The VOC emission factor was supplied by the permittee in the PTI application for PTI 04-1046. If required, the permittee shall verify the coke cutting

emission factor using Methods 1 through 4, 25, and 204 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

1.b Emission Limitation:

12.12 tons per year of VOC per rolling, 12-moth period from coke cutting

Applicable Compliance Method:

If required, compliance shall be determined by multiplying the VOC emission factor of 44.28 pounds VOC per blowdown cycle by the number of blowdown cycles per month to obtain the monthly total VOC emissions, add this value to the total for the previous 11 months to obtain the 12-month total VOC emissions (in pounds), and divide by 2000 lbs/ton.

The VOC emission factor was supplied by the company in the PTI application for PTI 04-1046.

1.c Emission Limitation:

10.81 tons per year of VOC as a rolling, 12-month summation from fugitive leaks

Applicable Compliance Method:

If required, compliance shall be determined by multiplying the number of components determined to be leaking under Part II of this permit by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by the number of hours leaking per month, and divided by 2000 lbs/ton to obtain the VOC emission rate in tons per month for each type of leaking component. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates). Sum the monthly total emissions from all types of leaking components and add this value to the total for the previous 11 months to determine the 12-month total VOC emissions, in tons.

2. [PTI 04-1046]
If the Ohio EPA or the permittee believes that the emission factor specified above may not be representative of the actual emissions from this emissions unit, then the permittee shall conduct testing of the emissions unit to determine what the actual emission factor is, and submit the results of that testing to the Ohio EPA. Upon approval by the Director, the new emission factor shall be used for purposes of demonstrating compliance with the specified emission limits.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P037**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P037 - Sulfur Recovery Unit (SRU) Nos. 2 and 3 with Tail Gas Treater, Thermal Oxidizer, sulfur pit, and TRP SRU Flare All fugitive emissions from the SRU Nos. 2 and 3 are included with this emissions unit.	OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on 7/25/2002)	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on 8/5/1998)	2.7 lbs/hr carbon monoxide (CO) and 8.07 tons/yr CO as a rolling, 12-month summation 4.4 lbs/hr nitrogen oxides (NO_x) and 12.76 tons/yr NO_x as a rolling, 12-month summation 0.6 lb/hr particulate emissions and 1.74 tons/yr particulate emissions as a rolling, 12-month summation 172 tons/yr sulfur dioxide (SO_2) as a rolling, 12-month summation 6.2 tons/yr volatile organic compounds (VOC) as a rolling, 12-month summation (from fugitive equipment leaks) See sections A.I.2.b and A.II.2.
	40 CFR Part 60, Subpart J	See section A.I.2.c.
	OAC rule 3745-21-09(T)	See section A.I.2.d.

40 CFR Part 60, Subpart GGG	See section A.I.2.e and Part II, sections A.23 through A.25.
40 CFR Part 63, Subpart A	See sections A.I.2.f and A.I.2.g and Part II, sections A.26 through A.35.
40 CFR Part 63, Subpart CC	See sections A.I.2.g and A.I.2.h.
40 CFR Part 63, Subpart UUU	See section A.I.2.i and Part II, sections A.78 through A.98.
40 CFR Part 60, Subpart QQQ	See section A.I.2.j.

2. Additional Terms and Conditions

2.a The permittee shall re-route all NSPS sulfur recovery plant sulfur pit emissions such that they are treated, monitored, and included as part of the sulfur recovery plant's emissions subject to the NSPS Subpart J limit for SO_2, 40 CFR 60.104(a)(2), by no later than the first turnaround of the Claus train that occurs after July 18, 2001.

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee shall not discharge or cause the discharge of any gases into the atmosphere from any Claus sulfur recovery plant containing in excess of 250 ppm by volume (dry basis) of SO_2 at zero percent excess air.

Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.150 through A.159, for the requirements of 40 CFR Part 60, Subpart J; - New Source Performance Standards for Petroleum Refineries.

2.d The permittee shall comply with all applicable equipment leak terms and conditions referencing OAC rule 3745-21-09(T) in Part II, section A.4.c of this permit.

2.e As specified under 40 CFR 63.640(p), equipment leaks that are also subject to the provisions of 40 CFR Part 60 and 61 are required to comply only with the requirements of 40 CFR 63 Subpart CC.

2.f 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.g Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of sources subject to Subpart CC of 40 CFR Part 63.

2.h In accordance with 40 CFR Part 63, Subpart CC, the permittee shall comply with the applicable equipment leak provisions of 40 CFR Part 60, Subpart VV [see Part II, sections A.6 through A.22 of this permit that refers to Subpart VV] and paragraph (b) of 40 CFR 63.648 [see Part II, section A.70 of this permit] (except as provided in paragraphs (a)(1), (a)(2), and (c) through (i) of 40 CFR 63.648).

2.i The permittee shall comply with the emission limitations and work practice standards for existing sources in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR 63.1563(c).

2.j The permittee shall meet the individual drain system monitoring and record keeping requirements as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater System). Affected facilities are listed in section A.VI, Table 1 of the terms and conditions for emissions unit P025.

2.k The bypassing of any significant quantities of 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.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner.

2. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
The permittee shall continue to implement and maintain the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The comprehensive plan shall include, but not be limited to, the following:

   a. an identification of events, within the SRU or Tail Gas Treater or upstream/downstream units/operations, likely to cause malfunctions and/or non-routine shutdowns or bypasses of the SRU or Tail Gas Treater, and a description of the steps taken to prevent or minimize the likelihood of such events from occurring;

   b. a description of steps or procedures reasonably available to be taken in order to prevent or minimize flaring of feeds to the SRUs during any period when one or more SRUs is shutdown or being bypassed, along with an indication of limitations on the availability of such steps;

   c. a description of steps to be taken to minimize excess emissions from the SRUs during routine or scheduled startups and shutdowns of the SRUs and Tail Gas Treater;

   d. a comprehensive preventive maintenance program, including a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

e. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

f. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

III. Monitoring and/or Record Keeping Requirements

1. SO_2 Continuous Emissions Monitoring System

a. The permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of SO_2 emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

i. The span values for this monitor are 500 ppm SO_2 and 25 percent O2.

ii. The performance evaluations for this SO_2 monitor under 40 CFR 60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

b. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

c. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the CD prior to resetting the calibration, if performed, or record the amount of adjustment.

d. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

e. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in

continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

f. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

g. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   i. Calibration of CEMS.
   ii. CD determination and adjustment of CEMS.
   iii. Preventive maintenance of CEMS (including spare parts inventory).
   iv. Data recording, calculations, and reporting.
   v. Accuracy audit procedures including sampling and analysis methods.
   vi. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

h. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

2. The permittee shall monitor and record the hourly and monthly thermal oxidizer average firing rate in terms of standard cubic feet per hour and per day. From this data, the permittee shall calculate and record the monthly and rolling 12-month total CO, NO_x and particulate emissions in accordance with Section A.V.

3. The permittee shall monitor and record the monthly average stack oxygen content, fuel gas rate, and tail gas treater vent gas rate to the thermal oxidizer, and determine the monthly total gas flow. In addition, the permittee shall calculate and record the monthly average SO_2

concentration in the SRU stack from the data recorded by the continuous emission monitor. From these data, the permittee shall calculate and record the monthly total SO_2 emissions for that month and the 12-month, rolling summation of the monthly emissions in accordance with the procedures specified in A.V.

4. Emissions occurring during any malfunction, bypassing, startup or shutdown period shall be quantified and recorded.

5. For purposes of these monitoring and record keeping requirements, average daily and monthly gas flow rates shall be determined from data provided by continuous gas flow monitors, except that, in the event of a monitor malfunction, flow rate may be estimated based on historical data corresponding to the production rate of the emissions unit for the period of monitor malfunction. The monitor shall be repaired as soon as possible. Average fuel gas heat content shall be determined through analysis of grab samples of the fuel gas collected once per day where the limit of concern is expressed as an hourly number and no less than once per week where the limit is expressed as a 12-month, rolling total.

6. The permittee shall properly install, operate and maintain a device to continuously monitor the presence of the flare pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   For each day the emissions unit is in operation, the permittee shall record all periods during which there was no flare pilot flame or the monitoring equipment was not operating.

7. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
   The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

8. Except as otherwise provided above, all records required under Section A.III of this permit shall be maintained in accordance with the Monitoring and Related Record Keeping Requirements of Part I - General Terms and Conditions.

IV. Reporting Requirements

1. SO_2 Continuous Emissions Monitoring System Reporting Requirements

   a. The permittee shall submit an SO_2 excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 12-hour average concentration greater than 250 ppm by volume (dry basis) of SO_2 at zero percent excess air. Written reports of excess emissions shall include the following information:

i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60 Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.
ii. Identification and location of monitors in the CEMS.
iii. Manufacturer and model number of each monitor in the CEMS.

iv. Assessment of CEMS data accuracy and date of assessment as determined by a RATA, RAA, or CGA described in Section 5 of 40 CFR Part 60 Appendix F Procedure 1 including the RA for the RATA, the A for the RAA or CGA, the RM results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 of 40 CFR Part 60 Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60 Appendix F, Procedure 1.

2. The permittee shall submit deviation (excursion) reports, that identify all periods during which the pilot flame was not present. The reports shall include the date, time, and duration of each time period. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter.

   These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      2.7 lbs/hr CO

      Applicable Compliance Method:

      Multiply the AP-42 emission factor (Table 1.4-1 dated July 1998) of 84 lb/MMSCF of fuel gas burned corrected for heating value by the actual fuel gas burned in MMSCF/hr (average monthly fuel gas burned is acceptable). If required, Methods 1 through 4 and Method 10 shall be used to demonstrate compliance. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.

   b. Emission Limitation:

      8.07 tons/yr CO as a rolling 12-month summation

      Applicable Compliance Method:

Multiply the lbs/hr CO as determined above by the number of hours operated per month to determine the monthly CO emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total CO emissions.

c. Emission Limitation:

4.4 lbs/hr NO_x

Applicable Compliance Method:

Multiply the manufacturer's guaranteed low-NO_x burner emission factor of 0.10 lb/mmBtu of fuel gas burned by the actual fuel gas burned in MMBTU/hr (average monthly fuel gas burned is acceptable) to determine the hourly CO emissions. If required, Methods 1 through 4 and Method 7E shall be used to demonstrate compliance. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Emission Limitation:

12.76 tons/yr NO_x as a rolling 12-month summation

Applicable Compliance Method:

Multiply the lbs/hr NO_x as determined above by the number of hours operated per month to determine the monthly NO_x emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total NO_x emissions.

e. Emission Limitation:

0.6 lb/hr particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor (Table 1.4-1 dated July 1998) of 7.6 lb/MMSCF of fuel gas burned corrected for heating value by the actual fuel gas burned in MMSCF/hr (average monthly fuel gas burned is acceptable). If required, Methods 1 through 4 and Method 5 shall be used to demonstrate compliance. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:

1.74 tons/yr particulate emissions as a rolling 12-month summation

Applicable Compliance Method:

Multiply the lbs/hr particulate emissions as determined above by the number of hours operated per month to determine the monthly particulate emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total particulate emissions.

g. Emission Limitation:

250 ppm by volume (dry basis) of SO_2 at zero percent excess air

Applicable Compliance Method:

The monitoring and record keeping requirements of A.III shall be used to demonstrate compliance. If required, the procedures outlined under 40 CFR 60.106(f) shall be used to demonstrate compliance.

h. Emission Limitation:

172 tons/yr SO_2 as a rolling, 12-month summation;

Applicable Compliance Method:

Multiply the monthly average SO_2 concentration from the CEM by the monthly total gas flow to determine the monthly total SO_2 emissions.

i. Emission Limitation:

6.2 tons/yr VOC as a rolling, 12-month summation (from fugitive equipment leaks)

Applicable Compliance Method:

If required, compliance shall be determined by multiplying the number of components determined to be leaking under Part II, section A.III of this permit by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by the number of hours leaking per month, and divided by 2000 lbs/ton to obtain the VOC emission rate in tons per month for each type of leaking component. The leak screening values are listed in tables 2-10 and 2-14 of Protocol for Equipment Leak Emission Estimates (EPA document 453/R-95-017 or subsequent updates). Sum the monthly total emissions from all types of leaking components and add this value to the total for the previous 11 months to determine the 12-month total VOC emissions in tons.

2. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B (e.g., PS 2 for SO_2 and NO_X). In addition, analyze the

appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

VI. Miscellaneous Requirements

1. Continuous SO_2 Monitoring - Certified Systems Statement of Certification
A statement of certification of the existing continuous SO_2 monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6. Proof of certification shall be made available to the Toledo Division of Environmental Services upon request.

2. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1 the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

3. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

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
P041 - Isocracker 2 controlled by West Flare: This process cracks heavy feed stock to gasoline and kerosene.	OAC rule 3745-21-09(T)	See section A.I.2.a.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	40 CFR Part 60, Subpart GGG	See section A.I.2.f and Part II, sections A.23 through A.25.
	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.e and Part II, sections A.65 through A.67.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

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

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Refer to Part II of this permit for the applicable monitoring, record keeping, reporting, and testing requirements for refinery flares.

2.f Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. This emissions unit shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [see Part II of this permit].

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
P042 - Hydrogen Plant: This process produces hydrogen from fuel gas	OAC rule 3745-21-09(T)	See section A.I.2.a.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

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

2.c Table 6 of 40 CFR Part 63, Subpart CC, in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
P043 - Poly Plant controlled by the West Flare:	OAC rule 3745-21-09(T)	See section A.I.2.a.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
This process absorbs H_2S and salts from sour fuel gas.	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
All fugitive emissions from the Poly Plant are included with this emissions unit.	miscellaneous process vents 40 CFR Part 63, Subpart CC	See section A.I.2.e and Part II, sections A.65 through A.67.
	OAC rule 3745-21-09(UU)(1)	See section A.I.2.f and Part II, section A.4.f.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

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

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Refer to Part II of this permit for the applicable monitoring, record keeping, reporting and testing requirements for refinery flares.

2.f All VOC emissions from the SPOP waterwash tower spentwash flash drum and the POLY waterwash tower spentwash flash drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [see Part II, section A.4.e of this permit]. See Part II of this permit for the applicable monitoring, record keeping, reporting, and testing requirements for refinery flares.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P044**

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
P044 - Diesel Engine #1: Fire water pump powered by Cummins diesel engine with a maximum rated input capacity of 1.7 mmBtu/hr	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(B)	exempt See section A.I.2.a.
	40 CFR Part 63, Subpart ZZZZ	See section A.I.2.b.

2. Additional Terms and Conditions

2.a Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G).

2.b Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.179 through A.199, for the requirements of 40 CFR Part 63, Subpart ZZZZ; - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. The requirements of 40 CFR Part 63, Subpart ZZZZ will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall burn only diesel fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation:

      Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

      Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P045**

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
P045 - Diesel Engine #2: Fire water pump powered by Cummins diesel engine with a maximum rated input capacity of 1.7 mmBtu/hr	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(B)	exempt See section A.I.2.a.
	40 CFR Part 63, Subpart ZZZZ	See section A.I.2.b.

2. Additional Terms and Conditions

2.a Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G).

2.b Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.179 through A.199, for the requirements of 40 CFR Part 63, Subpart ZZZZ; - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. The requirements of 40 CFR Part 63, Subpart ZZZZ will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall burn only diesel fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation:

      Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

      Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **P048**

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
P048 - Knock Motors: 6 gasoline test engines and 1 aviation gas test engine with a maximum rating of 15 hp each used to determine the octane rating of gasoline produced	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions from each engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(B)	exempt See section A.I.2.a.

2. Additional Terms and Conditions

2.a Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G).

II. Operational Restrictions

1. The permittee shall burn only gasoline or aviation and/or jet fuel in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than gasoline or aviation and/or jet fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than gasoline or aviation and/or jet fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

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

   a. Emission Limitation:

      Particulate emissions from each engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation:

      Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

      Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

Emissions Unit ID: Diesel Engine #3 (P053)
Activity Description: Diesel Engine used to pump water

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P053 - Diesel Engine #3: fire water pump powered by a diesel engine with a maximum rated input capacity of 0.64 mmBtu/hr (251 hp)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(G)	exempt See section A.I.2.a.
	40 CFR Part 63, Subpart ZZZZ	See section A.I.2.b.

2. Additional Terms and Conditions

2.a Stationary internal combustion engines, which have rated heat, input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G) per OAC rule 3745-18-06(B).

2.b Stationary internal combustion engines, which have rated heat, input capacities equal to or less than 500 hp rated capacity are exempt from 40 CFR 63, Subpart ZZZZ.

II. Operational Restrictions

1. The permittee shall burn only diesel fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation:

      Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

      Applicable Compliance Method:

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

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)

Emissions Unit ID: Diesel Engine #4 (P054)
Activity Description: Diesel Engine used to pump water

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P054 - Diesel Engine #4: fire water pump powered by a diesel engine with a maximum rated input capacity of 2.19 mmBtu/hr (860 hp)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(G)	exempt See section A.I.2.a.
	40 CFR Part 63, Subpart ZZZZ	See section A.I.2.b.

2. Additional Terms and Conditions

2.a Stationary internal combustion engines, which have rated heat, input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G) per OAC rule 3745-18-06(B).

2.b Refer to Part II - Specific Facility Terms and Conditions of this permit, sections A.179 through A.199, for the requirements of 40 CFR Part 63, Subpart ZZZZ; -National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. The requirements of 40 CFR Part 63, Subpart ZZZZ will become applicable to this emissions unit upon final promulgation in the Federal Register.

II. Operational Restrictions

1. The permittee shall burn only diesel fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation:

      Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

      Applicable Compliance Method:

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

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
P055 – Cooling Tower #1 is a 40,000 gpm non-contact cooling tower	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	111.5 lbs/hr of particulate emissions See section A.I.2.a.

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 circulating cooling water. Based on the cooling water maximum process flow rate of 40,000 gallons per minute, a PWR of 10,000 tons per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 111.5 lbs/hr.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall test and record the TDS concentration, in mg/l, of the cooling water at least once per quarter as long as the reading is less than 10,000 mg/l. If a reading shows greater than 10,000 mg/l, then monitoring shall be increased to at least every week

until 8 consecutive weeks show a TDS concentration below this level. The TDS concentration shall be measured using one of the following methods: 1) a conductivity meter, 2) 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 3) other equivalent method approved by USEPA or the Toledo Division of Environmental Services.

2. Quarterly, the permittee shall calculate and record the particulate emissions, in pounds per hour, using the equations specified in section A.V.1.a of this permit for any TDS reading during that quarter which exceeds 27,500 mg/l (if any). (TDS concentrations below 27,500 mg/l would not cause an exceedance of the allowable lb/hr limit.)

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify all exceedances of the allowable particulate emission limitation of 111.5 lbs/hr.

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:

      111.5 lbs/hr of particulate emissions

      Applicable Compliance Method:

      The particulate emissions shall be calculated as follows: [(40,000 gallons/minute) x (mg/liter TDS) x (0.0002) x (60 min/hr) x (3.785 liters/gallon)] ÷ (453,592 mg/lb) = particulate emissions, in lbs/hr

      where:

      40,000 gallons/minute = the maximum water flow rate;
      mg/liter = the measured TDS level;
      0.0002 = the maximum drift loss factor (based on AP42 1/95 edition);
      60 min/hr = conversion factor for minutes to hours;
      3.785 liters/gallon = conversion factor for liters to gallons; and
      453,592 mg/lb = conversion factor for milligrams to pounds.

   b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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
P056 – Cooling Tower #3 is a 13,000 gpm non-contact cooling tower	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	93.9 lbs/hr of particulate emissions See section A.I.2.a.

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 circulating cooling water. Based on the cooling water maximum process flow rate of 13,000 gallons per minute, a PWR of 3,253 tons per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 93.9 lbs/hr.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall test and record the TDS concentration, in mg/l, of the cooling water at least once per quarter as long as the reading is less than 10,000 mg/l. If a reading shows greater than 10,000 mg/l, then monitoring shall be increased to at least every week

until 8 consecutive weeks show a TDS concentration below this level. The TDS concentration shall be measured using one of the following methods: 1) a conductivity meter, 2) 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 3) other equivalent method approved by USEPA or the Toledo Department of Environmental Services.

2. Quarterly, the permittee shall calculate and record the particulate emissions, in pounds per hour, using the equations specified in section A.V.1.a of this permit for any TDS reading during that quarter which exceeds 72,000 mg/l (if any). (TDS concentrations below 72,000 mg/l would not cause and exceedance of the allowable lb/hr limit.)

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify all exceedances of the allowable particulate emission limitation of 93.9 lbs/hr.

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:

      93.9 lbs/hr of particulate emissions

      Applicable Compliance Method:

      The particulate emissions shall be calculated as follows: (13,000 gallons/minute) x (mg/liter TDS) x (0.0002) x (60 min/hr) x (3.785 liters/gallon) ÷ (453,592 mg/lb) = particulate emissions, in lbs/hr

      where:

      13,000 gallons/minute = the maximum water flow rate;
      mg/liter = the measured TDS level;
      0.0002 = the maximum drift loss factor (based on AP42 1/95 edition);
      60 min/hr = conversion factor for minutes to hours;
      3.785 liters/gallon = conversion factor for liters to gallons; and
      453,592 mg/lb = conversion factor for milligrams to pounds.

   b. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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
P057 – Cooling Tower #4 is a 22,000 gpm non-contact cooling tower	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	101.9 lbs/hr of particulate emissions See section A.I.2.a.

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 circulating cooling water. Based on the cooling water maximum process flow rate of 22,000 gallons per minute, a PWR of 5,504 tons per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 101.9 lbs/hr.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall test and record the TDS concentration, in mg/l, of the cooling water at least once per quarter as long as the reading is less than 10,000 mg/l. If a reading shows greater than 10,000 mg/l, then monitoring shall be increased to at least every week

until 8 consecutive weeks show a TDS concentration below this level. The TDS concentration shall be measured using one of the following methods: 1) a conductivity meter, 2) 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 3) other equivalent method approved by USEPA or the Toledo Division of Environmental Services.

2. Quarterly, the permittee shall calculate and record the particulate emissions, in pounds per hour, using the equations specified in section A.V.1.a of this permit for any TDS reading during that quarter which exceeds 46,000 mg/l (if any). (TDS concentrations below 46,000 mg/l would not cause an exceedance of the allowable lb/hr limit).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify all exceedances of the allowable particulate emission limitation of 101.9 lbs/hr.

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:

      101.9 lbs/hr of particulate emissions

      Applicable Compliance Method:

      The particulate emissions shall be calculated as follows: (22,000 gallons/minute) x (mg/liter TDS) x (0.0002) x (60 min/hr) x (3.785 liters/gallon) ÷ (453,592 mg/lb) = particulate emissions, in lbs/hr

      where:

      22,000 gallons/minute = the maximum water flow rate;
      mg/liter = the measured TDS level;
      0.0002 = the maximum drift loss factor (based on AP42 1/95 edition);
      60 min/hr = conversion factor for minutes to hours;
      3.785 liters/gallon = conversion factor for liters to gallons; and
      453,592 mg/lb = conversion factor for milligrams to pounds.

   b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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
P058 – DHT Cooling Tower is a 9,840 gpm non-contact cooling tower	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	89.8 lbs/hr of particulate emissions See section A.I.2.a.

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 circulating cooling water. Based on the cooling water maximum process flow rate of 9,840 gallons per minute, a PWR of 2,462 tons per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 89.8 lbs/hr.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall test and record the TDS concentration, in mg/l, of the cooling water at least once per quarter as long as the reading is less than 10,000 mg/l. If a reading shows greater than 10,000 mg/l, then monitoring shall be increased to at least every week

until 8 consecutive weeks show a TDS concentration below this level. The TDS concentration shall be measured using one of the following methods: 1) a conductivity meter, 2) 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 3) other equivalent method approved by USEPA or the Toledo Division of Environmental Services.

2. Quarterly, the permittee shall calculate and record the particulate emissions, in pounds per hour, using the equations specified in section A.V.1.a of this permit for any TDS reading during that quarter which exceeds 91,000 mg/l (if any). (TDS concentrations below 91,000 mg/l would not cause an exceedance of the allowable lb/hr limit.)

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify all exceedances of the allowable particulate emission limitation of 89.8 lbs/hr.

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:

      89.8 lbs/hr of particulate emissions

      Applicable Compliance Method:

      The particulate emissions shall be calculated as follows: (9,840 gallons/minute) x (mg/liter TDS) x (0.0002) x (60 min/hr) x (3.785 liters/gallon) ÷ (453,592 mg/lb) = particulate emissions, in lbs/hr

      where:

      9,840 gallons/minute = the maximum water flow rate;
      mg/liter = the measured TDS level;
      0.0002 = the maximum drift loss factor (based on AP42 1/95 edition);
      60 min/hr = conversion factor for minutes to hours;
      3.785 liters/gallon = conversion factor for liters to gallons; and
      453,592 mg/lb = conversion factor for milligrams to pounds.

   b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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
P059 - saturated gas plant with only fugitive emissions	OAC rule 3745-21-09(T)	See section A.I.2.a.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	40 CFR Part 60, Subpart GGG	See section A.I.2.e and Part II, sections A.23 through A.25.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35 of this permit] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.23 through A.25, and A.70 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart GGG.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P060 - unsaturated gas plant with only fugitive emissions	OAC rule 3745-21-09(T)	See section A.I.2.a.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.
	40 CFR Part 60, Subpart GGG	See section A.I.2.e and Part II, sections A.23 through A.25.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35 of this permit] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

2.e Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

3. Refer to Part II, sections A.23 through A.25, and A.70 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart GGG.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P061 - LPG Unit with only fugitive emissions	OAC rule 3745-21-09(T)	See section A.I.2.a.
	40 CFR Part 63, Subpart A	See sections A.I.2.b and A.I.2.c and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

[Note: Consistent with the U.S. EPA streamlining policy, the permittee may elect to demonstrate compliance with OAC rule 3745-21-09(T) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart CC for both equipment in organic HAP service and equipment not in organic HAP service. The MACT level monitoring of 40 CFR Part 63, Subpart CC is generally more stringent than the LDAR requirements of OAC rule 3745-21-09(T).]

2.b 40 CFR Part 63, Subpart A [see Part II, sections A.26 through A.35 of this permit] provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart A [see Part II, sections A.26, A.27, A.32, A.33, and A.35 of this permit] provides operational provisions that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.23 of this permit for the applicable equipment leak standards referencing 40 CFR Part 60, Subpart VV.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart A [see Part II, sections A.29 and A.31 of this permit] provides monitoring and record keeping requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, sections A.6 through A.18, and A.21 of this permit for the applicable equipment leak monitoring and record keeping requirements referencing 40 CFR Part 60, Subpart VV.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.30 of this permit] provides reporting requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.22 of this permit for the applicable equipment leak reporting requirements referencing 40 CFR Part 60, Subpart VV.

V. Testing Requirements

1. 40 CFR Part 63, Subpart A [see Part II, section A.28 of this permit] provides testing requirements that are pertinent to emissions units affected by 40 CFR Part 63, Subpart A.

2. Refer to Part II, section A.20 of this permit for the applicable equipment leak testing requirements referencing 40 CFR Part 60, Subpart VV.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P802 - Scaltech Unit vented to a vapor recovery and control system consisting of an eductor, vapor scrubber tank and carbon canister. In this process, dewatered sludge from the Oily Belt Filter Press (P014) is mixed with water or oil to make a slurry. The slurry product of this process is injected into the coker (P017 or P036) as a replacement for cooling water in the quench cycle.	OAC rule 3745-31-05(A)(3) (PTI 04-1010)	0.23 pound per hour and 1.0 ton per year of volatile organic compounds (VOC) stack emissions 3.3 tons per year VOC emissions from equipment leaks See section A.I.2.a.
	equipment leaks OAC rule 3745-21-09(T)	See section A.I.2.b.
	40 CFR Part 60, Subpart GGG	See section A.I.2.c and Part II, sections A.23 through A.25.
	40 CFR Part 63, Subpart A	See sections A.I.2.d and A.I.2.e and Part II, sections A.26 through A.35.
	40 CFR Part 63, Subpart CC	See sections A.I.2.e and A.I.2.f.

2. Additional Terms and Conditions

2.a The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T), 40 CFR Part 60, Subpart GGG, and 40 CFR Part 63, Subpart CC.

2.b Refer to Part II, section A.4.c of this permit for the state requirements for equipment leaks referencing OAC rule 3745-21-09(T).

2.c Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

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

2.e Table 6 of 40 CFR Part 63, Subpart CC in Part II, section A.77 specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f Refer to Part II, sections A.6 through A.22 of this permit for the applicable equipment leak provisions referencing 40 CFR Part 60, Subpart VV.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the carbon canister(s) according to one of the following options.

   a. The permittee shall monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The exhaust shall be monitored at intervals no greater than 20 percent of the design carbon replacement interval; or

   b. The permittee shall replace the carbon in the carbon adsorption system with fresh carbon at a regular pre-determined interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system.

3. The permittee shall maintain records of the following information related to the carbon canister(s).

   a. the date and time the concentration level of organic compounds in the exhaust vent is monitored and a notation of whether or not carbon breakthrough is detected; and

   b. the replacement dates of the carbon canister(s).

IV. Reporting Requirements

1. The permittee shall submit semi-annual deviation (excursion) reports based on the monitoring option selected under section A.III.2. If the permittee chooses the option under section A.III.2.a, then deviation reports shall be submitted according to paragraphs 2.a and 2.b of this section. If the permittee chooses the option under section A.III.2.b, then deviation reports shall be submitted according to paragraphs 2.c of this section. The deviation reports shall identify the following information:

   a. each period when the carbon canister(s) was (were) not replaced with fresh carbon immediately when carbon breakthrough was indicated;

   b. each period when the exhaust was not monitored within 20 percent of the design carbon replacement interval; and

   c. each period when carbon canister is not replaced within a period less than the design replacement interval.

   If no deviations occurred during the 6-month period, then the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

   These reports shall be submitted semi-annually, i.e., by January 30 and July 30 of each year, and shall cover the previous 6 calendar months.

V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.23 pound per hour VOC stack emissions

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 25A of 40 CFR Part 60, Appendix A.

   b. Emission Limitation

      1.0 ton/yr VOC stack emissions

      Applicable Compliance Method:

Since the annual emission limitation is based on the hourly emission limit at 8760 hours per year, compliance with the hourly emission limitation constitutes compliance with the annual emission limitation.

c. Emission Limitation

3.3 tons/yr VOC emissions from equipment leaks

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring, record keeping, and reporting requirements for equipment leaks in Part II.

The monitoring, record keeping and reporting requirements for equipment leaks in Part II shall serve as demonstration of compliance. The allowable emission rate from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per year for each type of leaking component for a total of 3.3 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
T010 is a 69,193.9 barrel storage tank identified as PR-500152. The tank has an internal floating roof with a flexible wiper primary seal. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.d through A.I.2.g, A.II.1 and Part II, section A.68.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]

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

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

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

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]

The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(2), see paragraph b. of this section.

b. [40 CFR 63.120(a)(2), (a)(2)(i) and (a)(2)(ii)]
For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in paragraphs i. and ii. of this section.

i. The permittee shall visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the seal each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(2). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by 40 CFR 63.120(a)(2)(i) [see paragraph b. of this section], the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.i of this section cannot

be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(2)(ii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

   a. [40 CFR 63.654(g)(1)]
   For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

   b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
   The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under

63.120(a)(2)(i) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

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

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

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(2)(ii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]

Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(2), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

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
T011 is a 80,232.05 barrel storage tank identified as PR-500153. The tank has an internal floating roof with a mechanical shoe primary seal. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.d through A.I.2.g, A.II.1 and Part II, section A.68.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]

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

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

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

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]

The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(2), see paragraph b. of this section.

b. [40 CFR 63.120(a)(2), (a)(2)(i) and (a)(2)(ii)]
For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in paragraphs i. and ii. of this section.

i. The permittee shall visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the seal each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(2). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by 40 CFR 63.120(a)(2)(i) [see paragraph b. of this section], the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.i of this section cannot

be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(2)(ii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]

If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized.. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

   a. [40 CFR 63.654(g)(1)]
   For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(2)(i) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

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

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

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(2)(ii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify

the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(2), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T012 is a 2,538.08 barrel storage tank identified as PR-500403. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.d through A.I.2.g, A.II.1 and Part II, section A.68.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]

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

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

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

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]

The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]

If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]

Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]

For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

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

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

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]

Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T013 is a 54,593.71 barrel storage tank identified as PR-500124. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.d through A.I.2.g, A.II.1 and Part II, section A.68.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]

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

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

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

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]

The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]

If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]

Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]

For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

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

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

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]

Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T014 is a 2,100 barrel storage tank identified as PR-500079. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.d through A.I.2.g, A.II.1 and Part II, section A.68.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

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

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]

When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage

vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]

If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

   a. [40 CFR 63.654(g)(1)]
   For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

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

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

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify

the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

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
T015 is a 2,100 barrel fixed roof storage vessel identified as tank number PR-500080. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: T016 - 79,703.69 barrel petroleum liquid storage tank

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T016 is a 79,703.69 barrel petroleum liquid storage tank identified as PR-500154. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

Emissions Unit ID: T016 - 79,703.69 barrel petroleum liquid storage tank

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T017 is a 79,723.69 barrel petroleum liquid storage tank identified as PR-500155. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T018 is a 78,665.02 barrel petroleum liquid storage tank identified as PR-500156. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: T019 - 78,976.93 barrel petroleum liquid storage tank

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T019 is a 78,976.93 barrel petroleum liquid storage tank identified as PR-500157. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T020 is a 146,230 barrel petroleum liquid storage tank identified as PR-500647. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T021 is a 146,268.8 barrel petroleum liquid storage tank identified as PR-500646. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T024 is a 147,655.7 barrel petroleum liquid storage tank identified as PR-500812. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T025 is a 148,123.6 barrel petroleum liquid storage tank identified as PR-500811. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. All fugitive emissions from the East tank farm are included with this storage tank.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not

an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T026 is a 65,437.34 barrel petroleum liquid storage tank identified as PR-500076. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T027 is a 42,134.48 barrel petroleum liquid storage tank identified as PR-500186. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T028 is a 41,937.25 barrel petroleum liquid storage tank identified as PR-500189. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T029 is a 95,276.64 barrel petroleum liquid storage tank identified as PR-500099. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: T030 - 147,336.3 barrel petroleum liquid storage tank

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T030 is a 147,336.3 barrel petroleum liquid storage tank identified as PR-500813. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T031 is a 147,742.3 barrel petroleum liquid storage tank identified as PR-500814. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T032 is a 148,267.3 barrel petroleum liquid storage tank identified as PR-500815. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: T033 - 148,313 barrel petroleum liquid storage tank

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T033 is a 148,313 barrel petroleum liquid storage tank identified as PR-500816. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T034 is a 148,297.5 barrel petroleum liquid storage tank identified as PR-500817. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T035 is a 42,211.44 barrel petroleum liquid storage tank identified as PR-500143. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T036 is a 42,211.35 barrel petroleum liquid storage tank identified as PR-500123. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T037 is a 41,782.97 barrel petroleum liquid storage tank identified as PR-500122. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T038 is a 41,770.82 barrel petroleum liquid storage tank identified as PR-500120. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. All fugitive emissions from the West tank farm are included with this storage tank.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not

an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T039 is a 41,965.73 barrel petroleum liquid storage tank identified as PR-500121. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T040 is a 44,404.5 barrel petroleum liquid storage tank identified as PR-500131. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T041 is a 42,614.05 barrel petroleum liquid storage tank identified as PR-500130. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

Emissions Unit ID: Spheroid/Vapor Control, PR-662 (T042)
Activity Description: Storage of Petroleum Liquids

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T042 is a 30,000-barrel spheroidal storage vessel identified as tank number PR-500662. This tank is a pressurized sphere that vents to a closed loop refrigeration vapor recovery system and the main hydrocarbon flare system.	OAC rule 3745-21-07(D)(1)(c)	See section A.II.1.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. This tank shall be vented to a vapor recovery system and a flare that reduces emissions of organic materials into the atmosphere by more than 90 percent by weight. All tank gauging or sampling devices shall be gas tight except when the tank gauging or sampling is taking place.

III. Monitoring and/or Record keeping Requirements

1. The flare shall be monitored with a thermocouple or any other equivalent device to detect the presence of a pilot flame.

2. The permittee shall maintain records of all times when the pilot flame is not present.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pilot flame of the flare is not present.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

Emissions Unit ID: Spheroid/Vapor Control, PR-663 (T043)
Activity Description: Storage of Petroleum Liquids

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T043 is a 30,000-barrel spheroidal storage vessel identified as tank number PR-500663. This tank is a pressurized sphere that vents to a closed loop refrigeration vapor recovery system and the main hydrocarbon flare system.	OAC rule 3745-21-07(D)(1)(c)	See section A.II.1.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. This tank shall be vented to a vapor recovery system and a flare that reduces emissions of organic materials into the atmosphere by more than 90 percent by weight. All tank gauging or sampling devices shall be gas tight except when the tank gauging or sampling is taking place.

III. Monitoring and/or Record keeping Requirements

1. The flare shall be monitored with a thermocouple or any other equivalent device to detect the presence of a pilot flame.

2. The permittee shall maintain records of all times when the pilot flame is not present.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pilot flame of the flare is not present.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T044 is a 131,660 barrel petroleum liquid storage tank identified as PR-500158. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T045 is a 35,589.28 barrel storage tank identified as PR-500776. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC	See sections A.I.2.g through A.I.2.j and Part II, sections A.63 through A.77.
	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-029 as issued on 1/16/1975)	See sections A.I.2.c through A.I.2.f.
	40 CFR Part 60, Subpart K	See section A.I.2.a.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart K is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with 40 CFR Part 60, Subpart K.

2.d The fixed roof storage tank shall be equipped with an internal floating roof.

2.e The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.f All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.g Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.h Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.i The permittee shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.j To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be

maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

   a. [40 CFR 63.120(a)(1)]
   The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

   b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
   For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

      i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

      ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]

The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur.

The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

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: T046

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T046 is a 34,520.7 barrel storage tank identified as PR-500777. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC	See sections A.I.2.g through A.I.2.j and Part II, sections A.63 through A.77.
	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-029 as issued on 1/16/1975)	See sections A.I.2.c through A.I.2.f.
	40 CFR Part 60, Subpart K	See section A.I.2.a.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart K is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with 40 CFR Part 60, Subpart K.

2.d The fixed roof storage tank shall be equipped with an internal floating roof.

2.e The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.f All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.g Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.h Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.i The permittee shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.j To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be

maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

   a. [40 CFR 63.120(a)(1)]
   The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

   b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
   For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

      i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

      ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]

The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur.

The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T047**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T047 is a 150,609.09 barrel fixed roof storage vessel identified as tank number PR-500216. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-112 issued April 24, 1978)	See section A.I.2.d.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Ka	See section A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control

equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Ka, but not to the control requirements of Subpart Ka, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.d The requirements established pursuant to this rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T051 is a 1,480 barrel storage tank identified as PR-500697. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.d through A.I.2.g, A.II.1, and Part II, sections A.63 through A.77.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

      i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of

actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator of USEPA and the Toledo Division of Environmental Services at the addresses

listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

EPA Region V	Toledo Division of Environmental Services
Director	Air Section
Air and Radiation Division	348 South Erie Street
77 West Jackson Boulevard	Toledo, Ohio 43602-1633
Chicago, Illinois 60604-3507	

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This

notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T053**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T053 is a 10,124.56 barrel fixed roof storage vessel identified as tank number PR-500048. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T055**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T055 is a 10,491 barrel fixed roof storage vessel identified as tank number PR-500049. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T056**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T056 is a 10,478.07 barrel fixed roof storage vessel identified as tank number PR-500055. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T058**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T058 is a 10,491.43 barrel fixed roof storage vessel identified as tank number PR-500058. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T059 is a 41,665.08 barrel petroleum liquid storage tank identified as PR-500064. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T060 is a 42,212.73 barrel petroleum liquid storage tank identified as PR-500065. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T063**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T063 is a 37,596.55 barrel fixed roof storage vessel identified as tank number PR-500068. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T064**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T064 is a 37,597.66 barrel fixed roof storage vessel identified as tank number PR-500069. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T066**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T066 is a 37,599.55 barrel fixed roof storage vessel identified as tank number PR-500071. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T073 is a 5,260.22 barrel petroleum liquid storage tank identified as PR-500084. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b and A.I.2.c.
	40 CFR Part 61, Subpart FF	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

2.d In accordance with 40 CFR Part 61, Subpart FF, the permittee shall meet the requirements as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater Treatment System). Although this emissions unit is not subject to 40 CFR Part 60, Subpart Kb, this emissions unit meets the requirements of the Alternative Standards for Tanks under 40 CFR 61.351(a)(2).

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: T074

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T074 is a 10,491 barrel storage tank identified as PR-500094. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.d through A.I.2.g, A.II.1 and Part II, section A.68.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

      i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of

actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator of USEPA and the Toledo Division of Environmental Services at the addresses

listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

EPA Region V	Toledo Division of Environmental Services
Director	Air Section
Air and Radiation Division	348 South Erie Street
77 West Jackson Boulevard	Toledo, Ohio 43602-1633
Chicago, Illinois 60604-3507	

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This

notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T075**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T075 is a 6,714.72 barrel storage vessel identified as tank number PR-500106. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC	See sections A.I.2.d through A.I.2.g, A.II.1, and Part II, sections A.63 through A.77.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]

Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]

The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg

supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]

If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator of USEPA and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

EPA Region V	Toledo Division of Environmental Services
Director	Air Section
Air and Radiation Division	348 South Erie Street
77 West Jackson Boulevard	Toledo, Ohio 43602-1633
Chicago, Illinois 60604-3507	

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

   a. [40 CFR 63.654(g)(1)]
   For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

   b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]

The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]

Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T076**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T076 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500107. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T077**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T077 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500108. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T078**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T078 is a 6,709.74 barrel fixed roof storage vessel identified as tank number PR-500109. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. All fugitive emissions from Asphalt Plant #1 are included with this emissions unit.	OAC rule 3745-21-09(L) 40 CFR Part 63, Subpart CC	See section A.I.2.a. See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T079**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T079 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500110. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T080**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T080 is a 80,676.92 barrel fixed roof storage vessel identified as tank number PR-500111. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T081**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T081 is a 80,000 barrel fixed roof storage vessel identified as tank number PR-500112. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T082**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T082 is a 30,056.59 barrel fixed roof storage vessel identified as tank number PR-500118. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T084 is a 71,165.97 barrel petroleum liquid storage tank identified as PR-500134. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T085 is a 78,834.6 barrel petroleum liquid storage tank identified as PR-500135. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T086**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T086 is a 78,994.84 barrel fixed roof storage vessel identified as tank number PR-500140. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T087**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T087 is a 79,568.3 barrel fixed roof storage vessel identified as tank number PR-500141. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T088**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T088 is a 80,799.17 barrel fixed roof storage vessel identified as tank number PR-500142. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T089**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T089 is a 79,570.35 barrel fixed roof storage vessel identified as tank number PR-500151. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T090 is a 41,586.15 barrel petroleum liquid storage tank identified as PR-500187. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T091 is a 42,065.3 barrel petroleum liquid storage tank identified as PR-500188. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T092**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T092 is a 119,238 barrel fixed roof storage vessel identified as tank number PR-500517. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T093**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T093 is a 10,123.22 barrel fixed roof storage vessel identified as tank number PR-500230. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T096 is a 19,276.11 barrel petroleum liquid storage tank identified as PR-500269. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T097 is a 19,563.97 barrel petroleum liquid storage tank identified as PR-500270. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T099**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T099 is a 12,693.4 barrel fixed roof storage vessel identified as tank number PR-500401. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T100**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T100 is a 2,538.08 barrel fixed roof storage vessel identified as tank number PR-500402. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T101**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T101 is a 9,429.74 barrel fixed roof storage vessel identified as tank number PR-500404. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T102 is a 147,845.1 barrel petroleum liquid storage tank identified as PR-500645. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z) 40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See section A.I.2.a. See sections A.I.2.b. and A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(Z) as specified in Part II, section A.4.d, and detailed in Part II, section A.201.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

2.c The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G, as specified in Part II, sections A.36 through A.38, except as specified in 40 CFR 63.646(b) through (l) [see Part II, section A.68]. While 40 CFR Part 63, Subpart G is not an applicable rule for this emissions unit, certain portions are applicable due to a reference in 40 CFR Part 63, Subpart CC [See detailed permit conditions in Part II, section A.201].

II. Operational Restrictions

1. Refer to Part II, section A.201.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.201.c.

IV. Reporting Requirements

1. Refer to Part II, section A.201.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T106**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T106 is a 10,106.74 barrel fixed roof storage vessel identified as tank number PR-500703. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T107**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T107 is a 10,106.74 barrel fixed roof storage vessel identified as tank number PR-500704. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T108**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T108 is a 10,106.74 barrel fixed roof storage vessel identified as tank number PR-500705. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T109**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T109 is a 20,120 barrel fixed roof storage vessel identified as tank number PR-500706. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T110**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T110 is a 54,126.29 barrel fixed roof storage vessel identified as tank number PR-500761. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T111**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T111 is a 42,731.97 barrel fixed roof storage vessel identified as tank number PR-500775. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T113**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T113 is a 10,206 barrel fixed roof storage vessel identified as tank number PR-500890. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1066 as issued on 7/2/1997)	21.21 tons per year volatile organic compounds (VOC)
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart K	See section A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control

equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      21.21 tons per year VOC

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using an emission calculation using Tanks 4.0, the latest version of the Tanks program and the actual annual tank throughput, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T114**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T114 is a 15,469 barrel fixed roof storage vessel identified as tank number PR-500891. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1066 as issued on 7/2/1997)	26.22 tons per year volatile organic compounds (VOC)
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart K	See section A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control

equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      26.22 tons per year VOC

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using an emission calculation using Tanks 4.0, the latest version of the Tanks program and the actual annual tank throughput, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T115**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T115 is a 139,200 barrel fixed roof storage vessel identified as tank number PR-500892. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1066 as issued on 7/2/1997)	38.93 tons per year volatile organic compounds (VOC)
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart K	See section A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control

equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      38.93 tons per year VOC

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using an emission calculation using Tanks 4.0, the latest version of the Tanks program and the actual annual tank throughput, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T116**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T116 is a 139,345 barrel fixed roof storage vessel identified as tank number PR-500893. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1066 as issued on 7/2/1997)	36.54 tons per year volatile organic compounds (VOC)
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart K	See section A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control

equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      36.54 tons per year VOC

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using an emission calculation using Tanks 4.0, the latest version of the Tanks program and the actual annual tank throughput, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: T117

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
T117 is a 55,000 barrel underground-pressurized cavern carved out of bedrock. This storage vessel stores propylene from the refinery. The pressure safety valve vents to the main hydrocarbon flare system in upset conditions only. The fugitive emissions from the LPG unit are included with this cavern.	OAC rule 3745-21-07(D)(1)	See section A.I.2.a.

2. Additional Terms and Conditions

2.a This tank is a pressure tank capable of maintaining working pressures sufficient to prevent vapor loss to the atmosphere during normal conditions. Therefore the control requirements included in OAC rule 3745-21-07(D)(1)(a) through (c) do not apply.

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: T117

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T120 is a 59,415.58 barrel petroleum liquid storage tank identified as PR-500132. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC.	OAC rule 3745-21-09(Z)	See sections A.I.2.a through A.I.2.e and Part II, section A.4.d.
	40 CFR Part 63, Subpart CC 40 CFR 63.646 (a), (f) and (g)	See sections A.I.2.f, A.I.2.g, A.II.1 through A.II.4, and Part II, sections A.63 through A.77.
	OAC rule 3745-31-05(A)(3) (PTI 04-131 as issued on 5/4/1979)	See section A.I.2.h.
	40 CFR Part 60, Subpart Ka	See section A.I.2.i.

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 10.0 square inches per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121 except as provided in 63.646(b) through 63.646(l) of Subpart CC [see sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.h The requirements established pursuant to this rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2.i As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart Ka is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

   a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

   a. [40 CFR 63.119(c)(1)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [see sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.120(b)(4) [see section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]

When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [see sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [see section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [see section A.III], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [see section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]
Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [see section A.III], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [see section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [see section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [see section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [see sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [see section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [see section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [see section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [see section A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [see section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [see section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in section A.IV.6 below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in section A.IV.6 occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by section A.IV.6 below.

6. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [see section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5),

or (b)(6) [see section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [see section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [see section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [see section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [see section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T136**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T136 is a 23,809.5 barrel fixed roof storage vessel identified as tank number PR-500686. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-379 as issued on 3/11/1987)	See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See section A.III.1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia).

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T137**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T137 is a 23,809.5 barrel fixed roof storage vessel identified as tank number PR-500688. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-379 as issued on 3/11/1987)	See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See section A.III.1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia).

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T138**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T138 is a 1,428.6 barrel fixed roof storage vessel identified as tank number PR-500687. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-379 as issued on 3/11/1987)	See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See section A.III.1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia).

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T139**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T139 is a 595.24 barrel fixed roof storage vessel identified as tank number PR-500685. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-379 as issued on 3/11/1987)	See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40CFR Part 60, Subpart Kb	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The design storage capacity of this storage vessel is less than 177 cubic meters (46, 763 gallons) and is defined as a Group 2 storage vessel under 40 CFR 63.641. Therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L).

2.d Since the design capacity of this storage vessel is greater than 75 m^3 (19,814 gal) and less than 151 m^3 (39,890 gal) and the maximum vapor pressure of the stored material is less than 2.176 psi, this tank is exempt from 40 CFR 60,

Subpart A and 40 CFR Part 60, Subpart Kb except for 40 CFR 60.116b(a) and (b), which requires the permittee to keep records of the dimensions and an analysis showing the capacity of the tank.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information:

   a. the types of petroleum liquids stored in the tank; and

   b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pounds per square inch absolute.

2. The permittee shall maintain readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo local air agency within 30 days of becoming aware of the occurrence.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T164**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T164 is a 10,110.16 barrel fixed roof storage vessel with a closed vent system controlled by either the West Acid Gas Flare (P001) or the SRU #1 Acid Gas Flare (P051). The tank is identified as tank number PR-500295 and is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-708 as modified on 8/5/1998)	0.73 ton per year volatile organic compounds (VOC)
		See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See sections A.I.2.d and A.I.2.e.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d This emissions unit shall be equipped with a closed vent system controlled by the West Acid Gas Flare (P001) or the SRU #1 Acid Gas Flare (P051) meeting the requirements of 40 CFR 60.18.

2.e The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as

indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b) of Subpart VV.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of all periods of operation during which the West Acid Gas Flare pilot flame and/or the SRU #1 Acid Gas Flare pilot flame is absent.

2. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

3. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.b.

4. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.2.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods recorded under section A.III.1 in which the pilot flame was absent. This report shall be submitted by January 31 and July 31 of each year for the previous 6 calendar months.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 0.73 ton per year. This report shall be submitted by January 31 of each year for the previous calendar year.

3. If no deviations occurred during the 6 month period under section A.IV.1 or the annual period under section A.IV.2, the permittee shall submit a report which states that no deviations occurred during that period.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b) of Subpart VV.

      Applicable Compliance Method:

      If required, compliance shall be demonstrated using the procedures described under 40 CFR 60.485(b)(1).

   b. Emission Limitation:

      0.73 ton per year VOC

      Applicable Compliance Method:

      If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions; records required by section A.III of the terms and conditions for this emissions unit; and an estimated flare control efficiency of 98 percent.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T166**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T166 is a 16,883.35 barrel external floating roof storage vessel with dual seals. The tank is identified as tank number PR-500014 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(Z)	See section A.I.2.b and Part II, section A.4.d.
	OAC rule 3745-31-05(A)(3) (PTI 04-770 as issued on 10/28/1992)	See sections A.I.2.c and A.I.2.d.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See section A.II.1.
	40 CFR Part 60, Subpart QQQ	See section A.II.2.
	40 CFR Part 61, Subpart FF	See section A.I.2.e.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d The maximum controlled emissions were estimated by BP to be 3×10^{-5} ton per year VOC emissions. No emission limitation was established in PTI 04-770 because the VOC emissions were considered negligible.

2.e In accordance with 40 CFR Part 61, Subpart FF, the permittee shall meet the requirements as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater Treatment System). This emissions unit meets the requirements of the Alternative Standards for Tanks under 40 CFR 61.351(a)(2).

II. Operational Restrictions

1. The external floating roof must meet the following specifications:

a. [40 CFR 60.112b(a)(2)(i)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i. [40 CFR 60.112b(a)(2)(i)(A)]
The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in section A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

ii. [40 CFR 60.112b(a)(2)(i)(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 otherwise allowed in section A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by section A.III.4.

b. [40 CFR 60.112b(a)(2)(ii)]
Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

c. [40 CFR 60.112b(a)(2)(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.

2. [PTI 04-770]
Each tank drain shall be equipped with water seal controls.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.116b]
The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. [40 CFR 60.113b(b)(1)]
The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

   a. [40 CFR 60.113b(b)(1)(i)]
   Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

   b. [40 CFR 60.113b(b)(1)(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.

   c. [40 CFR 60.113b(b)(1)(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 sections A.III.4.a and A.III.4.b.

5. [40 CFR 60.113b(b)(2)]
The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

a. [40 CFR 60.113b(b)(2)(i)]
Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

b. [40 CFR 60.113b(b)(2)(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 the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

c. [40 CFR 60.113b(b)(2)(iii)]
The total surface area of each gap described in section A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. [40 CFR 60.113b(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in section A.III.7.

7. [40 CFR 60.113b(b)(4)]
The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in sections A.III.7.a and A.III.7.b:

a. [40 CFR 60.113b(b)(4)(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 3.81cm.

i. [40 CFR 60.113b(b)(4)(i)(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 61cm above the stored liquid surface.

ii. [40 CFR 60.113b(b)(4)(i)(B)]

There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

b. [40 CFR 60.113b(b)(4)(ii)]
The secondary seal is to meet the following requirements:

i. [40 CFR 60.113b(b)(4)(ii)(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 section A.III.7.c.

ii. [40 CFR 60.113b(b)(4)(ii)(B)]
The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

iii. [40 CFR 60.113b(b)(4)(ii)(C)]
There are to be no holes, tears, or other openings in the seal or seal fabric.

c. [40 CFR 60.113b(b)(4)(iii)]
If a failure that is detected during inspections required in section A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. [40 CFR 60.113b(b)(5)]
The permittee shall notify the Administrator 30 days in advance of any gap measurements required by section A.III.4 to afford the Administrator the opportunity to have an observer present.

9. [40 CFR 60.113b(b)(6)]
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

a. [40 CFR 60.113b(b)(6)(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 seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or re-filling the storage vessel with VOL.

b. [40 CFR 60.113b(b)(6)(ii)]
For all inspections required by section A.III.9, the permittee shall notify the Administrator in writing at least 30 days prior to filling or re-filling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to re-filling. If the inspection required in section A.III.9 is not planned and the permittee could not have known about the inspection 30 days in

advance of refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

10. [63.640(n)(8)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required by section A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

    a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

    b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

11. [PTI 04-770]
Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

12. [PTI 04-770]
Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as possible, but not later than 24 hours after detection.

IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods when repairs required under section A.III.12 were not made within 24 hours after detection. If no deviations occurred during the annual period under A.IV.1, the permittee shall submit a report which states that no deviations occurred during that period. This report shall be submitted by January 31 and July 31of each year for the previous 6 calendar months, or, these reports can be submitted as part of the Periodic Reports.

2. The permittee shall meet the following requirements.

a. [60.115b(b)(2)]
Within 60 days of performing the seal gap measurement required by section A.III.4, furnish the Administrator with a report that contains:

i. The date of measurement;

ii. The raw data obtained in the measurement; and

iii. The calculations described in sections A.III.5 and A.III.6.

b. [60.115b(b)(3)]
Keep a record of each gap measurement performed as required by section A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

i. The date of measurement;

ii. The raw data obtained in the measurement;

iii. The calculations described in sections A.III.5 and A.III.6.

c. [60.115b(b)(4)]
After each seal gap measurement that detects gaps exceeding the limitations specified by section A.III.7, submit a report to the Administrator as part of the next Periodic Report required by 40 CFR Part 63. The report will identify the vessel and contain the information specified in sections A.IV.3.a.i through A.IV.3.a.iii, the date the vessel was emptied or the repairs made, and date of repair.

3. [63.640(n)(8)(iv) & 60.613b(b)(4)(iii)]
If an extension is utilized under section A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide the information in section A.IV.4.a below, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

a. A demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T167**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T167 is a 16,866.73 barrel external floating roof storage vessel with dual seals. The tank is identified as tank number PR-500015 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(Z)	See section A.I.2.b and Part II, section A.4.d.
	OAC rule 3745-31-05(A)(3) (PTI 04-770 as issued on 10/28/1992)	See sections A.I.2.c and A.I.2.d.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 and A.77.
	40 CFR Part 60, Subpart Kb	See section A.II.1.
	40 CFR Part 60, Subpart QQQ	See section A.II.2.
	40 CFR Part 61, Subpart FF	See section A.I.2.e

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d The maximum controlled emissions were estimated by BP to be 3×10^{-5} ton per year VOC emissions. No emission limitation was established in PTI 04-770 because the VOC emissions were considered negligible.

2.e In accordance with 40 CFR Part 61, Subpart FF, the permittee shall meet the requirements as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater Treatment System). This emissions unit meets the requirements of the Alternative Standards for Tanks under 40 CFR 61.351(a)(2).

II. Operational Restrictions

1. The external floating roof must meet the following specifications:

a. [40 CFR 60.112b(a)(2)(i)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i. [40 CFR 60.112b(a)(2)(i)(A)]
The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in section A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

ii. [40 CFR 60.112b(a)(2)(i)(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 otherwise allowed in section A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by section A.III.4.

b. [40 CFR 60.112b(a)(2)(ii)]
Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

c. [40 CFR 60.112b(a)(2)(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.

2. [PTI 04-770]
Each tank drain shall be equipped with water seal controls.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.116b]
The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. [40 CFR 60.113b(b)(1)]
The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

   a. [40 CFR 60.113b(b)(1)(i)]
   Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

   b. [40 CFR 60.113b(b)(1)(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.

   c. [40 CFR 60.113b(b)(1)(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 sections A.III.4.a and A.III.4.b.

5. [40 CFR 60.113b(b)(2)]
The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

a. [40 CFR 60.113b(b)(2)(i)]
Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

b. [40 CFR 60.113b(b)(2)(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 the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

c. [40 CFR 60.113b(b)(2)(iii)]
The total surface area of each gap described in section A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. [40 CFR 60.113b(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in section A.III.7.

7. [40 CFR 60.113b(b)(4)]
The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in sections A.III.7.a and A.III.7.b:

a. [40 CFR 60.113b(b)(4)(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 3.81cm.

i. [40 CFR 60.113b(b)(4)(i)(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 61cm above the stored liquid surface.

ii. [40 CFR 60.113b(b)(4)(i)(B)]

There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

b. [40 CFR 60.113b(b)(4)(ii)]
The secondary seal is to meet the following requirements:

i. [40 CFR 60.113b(b)(4)(ii)(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 section A.III.7.c.

ii. [40 CFR 60.113b(b)(4)(ii)(B)]
The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

iii. [40 CFR 60.113b(b)(4)(ii)(C)]
There are to be no holes, tears, or other openings in the seal or seal fabric.

c. [40 CFR 60.113b(b)(4)(iii)]
If a failure that is detected during inspections required in section A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. [40 CFR 60.113b(b)(5)]
The permittee shall notify the Administrator 30 days in advance of any gap measurements required by section A.III.4 to afford the Administrator the opportunity to have an observer present.

9. [40 CFR 60.113b(b)(6)]
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

a. [40 CFR 60.113b(b)(6)(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 seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or re-filling the storage vessel with VOL.

b. [40 CFR 60.113b(b)(6)(ii)]
For all inspections required by section A.III.9, the permittee shall notify the Administrator in writing at least 30 days prior to filling or re-filling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to re-filling. If the inspection required in section A.III.9 is not planned and the permittee could not have known about the inspection 30 days in

advance of refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

10. [63.640(n)(8)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required by section A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

    a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

    b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

11. [PTI 04-770]
Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

12. [PTI 04-770]
Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as possible, but not later than 24 hours after detection.

IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods when repairs required under section A.III.12 were not made within 24 hours after detection. If no deviations occurred during the annual period under A.IV.1, the permittee shall submit a report which states that no deviations occurred during that period. This report shall be submitted by January 31 and July 31of each year for the previous 6 calendar months, or, these reports can be submitted as part of the Periodic Reports.

2. The permittee shall meet the following requirements.

a. [60.115b(b)(2)]
Within 60 days of performing the seal gap measurement required by section A.III.4, furnish the Administrator with a report that contains:

i. The date of measurement;

ii. The raw data obtained in the measurement;

iii. The calculations described in sections A.III.5 and A.III.6.

b. [60.115b(b)(3)]
Keep a record of each gap measurement performed as required by section A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

i. The date of measurement;

ii. The raw data obtained in the measurement;

iii. The calculations described in sections A.III.5 and A.III.6.

c. [60.115b(b)(4)]
After each seal gap measurement that detects gaps exceeding the limitations specified by section A.III.7, submit a report to the Administrator as part of the next Periodic Report required by 40 CFR Part 63. The report will identify the vessel and contain the information specified in sections A.IV.3.a.i through A.IV.3.a.iii, the date the vessel was emptied or the repairs made, and date of repair.

3. [63.640(n)(8)(iv) & 60.613b(b)(4)(iii)]
If an extension is utilized under section A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide the information in section A.IV.4.a below, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

a. A demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T170 is a 10,065.33 barrel fixed roof storage vessel with a closed vent system controlled by either the West Acid Gas Flare (P001) or the SRU #1 Acid Gas Flare (P051). The tank is identified as tank number PR-500294 and is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-919 as modified on July 3, 1996)	1.42 tons per year volatile organic compounds (VOC)
		0.14 ton per year sulfur dioxide (SO_2)
		See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart K	See section A.I.2.d.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(6), a Group 2 storage vessel that is subject to the control requirements of 40 CFR Part 60, Subpart K, is required to comply only with the requirements of 40 CFR Part 60, Subpart K.

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR part 60, Subpart K.

2.d This emissions unit shall be equipped with a closed vent system controlled by the West Acid Gas Flare (P001) or the SRU #1 Acid Gas Flare (P051) meeting the requirements of 40 CFR 60.18.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of all periods of operation during which the West Acid Gas Flare pilot flame and/or the SRU #1 Acid Gas Flare pilot flame is absent.

2. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel; and

   b. the true vapor pressure of the stored material at maximum storage temperature.

3. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to sections A.V.1.a and A.V.1.b.

4. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods recorded under section A.III.1 in which the pilot flame was absent. This report shall be submitted by January 31 and July 31 of each year for the previous 6 calendar months.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 1.42 tons per year or the SO_2 emissions exceed 0.14 ton per year. This report shall be submitted by January 31 of each year for the previous calendar year.

3. If no deviations occurred during the 6 month period under section A.IV.1 or the annual period under section A.IV.2, the permittee shall submit a report which states that no deviations occurred during that period.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      1.42 tons per year VOC

Applicable Compliance Method:

If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions; records required by section A.III of the terms and conditions for this emissions unit; and an estimated flare control efficiency of 98 percent.

b. Emission Limitation:

0.14 ton per year SO_2

Applicable Compliance Method:

Divide the uncontrolled VOC emissions in tons per year from section A.V.1.a by the molecular weight of the VOC vapor (46.6 tons/ton-mole) and multiply by the hydrogen sulfide concentration of 5 mole percent. Multiply the previous product by the molecular weight of sulfur dioxide (64) and divide by the molecular weight of hydrogen sulfide (34).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T174**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T174 is a 80,000 barrel external floating roof storage vessel with dual seals. The tank is identified as tank number PR-500770 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(Z)	See section A.I.2.b and Part II, section A.4.d.
	OAC rule 3745-31-05(A)(3) (PTI 04-1024 as issued on 6/26/1996)	19 tons per year volatile organic compound (VOC) emissions
		See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See section A.II.1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The external floating roof must meet the following specifications:

a. [40 CFR 60.112b(a)(2)(i)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i. [40 CFR 60.112b(a)(2)(i)(A)]
The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in section A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

ii. [40 CFR 60.112b(a)(2)(i)(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 otherwise allowed in section A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by section A.III.4.

b. [40 CFR 60.112b(a)(2)(ii)]
Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

c. [40 CFR 60.112b(a)(2)(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.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.116b]
The permittee shall maintain records showing:

a. the type of material stored within the storage vessel;

b. the true vapor pressure of the stored material at maximum storage temperature; and

c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. [40 CFR 60.113b(b)(1)]
The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

a. [40 CFR 60.113b(b)(1)(i)]
Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

b. [40 CFR 60.113b(b)(1)(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.

c. [40 CFR 60.113b(b)(1)(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 sections A.III.4.a and A.III.4.b.

5. [40 CFR 60.113b(b)(2)]
The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

a. [40 CFR 60.113b(b)(2)(i)]
Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

b. [40 CFR 60.113b(b)(2)(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 the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

c. [40 CFR 60.113b(b)(2)(iii)]
The total surface area of each gap described in section A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. [40 CFR 60.113b(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in section A.III.7.

7. [40 CFR 60.113b(b)(4)]
The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in sections A.III.7.a and A.III.7.b:

a. [40 CFR 60.113b(b)(4)(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 3.81cm.

i. [40 CFR 60.113b(b)(4)(i)(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 61cm above the stored liquid surface.

ii. [40 CFR 60.113b(b)(4)(i)(B)]
There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

b. [40 CFR 60.113b(b)(4)(ii)]
The secondary seal is to meet the following requirements:

i. [40 CFR 60.113b(b)(4)(ii)(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 section A.III.7.c.

ii. [40 CFR 60.113b(b)(4)(ii)(B)]

The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

iii. [40 CFR 60.113b(b)(4)(ii)(C)]
There are to be no holes, tears, or other openings in the seal or seal fabric.

c. [40 CFR 60.113b(b)(4)(iii)]
If a failure that is detected during inspections required in section A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. [40 CFR 60.113b(b)(5)]
The permittee shall notify the Administrator 30 days in advance of any gap measurements required by section A.III.4 to afford the Administrator the opportunity to have an observer present.

9. [40 CFR 60.113b(b)(6)]
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

a. [40 CFR 60.113b(b)(6)(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 seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or re-filling the storage vessel with VOL.

b. [40 CFR 60.113b(b)(6)(ii)]
For all inspections required by section A.III.9, the permittee shall notify the Administrator in writing at least 30 days prior to filling or re-filling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to re-filling. If the inspection required in section A.III.9 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

10. [63.640(n)(8)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required by section A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 19 tons per year VOC.

2. If no deviations occurred during the annual period under section A.IV.1, the permittee shall submit a report which states that no deviations occurred during that period.

3. The permittee shall meet the following requirements.

a. [60.115b(b)(2)]
Within 60 days of performing the seal gap measurement required by section A.III.4, furnish the Administrator with a report that contains:

i. The date of measurement;

ii. The raw data obtained in the measurement;

iii. The calculations described in sections A.III.5 and A.III.6.

b. [60.115b(b)(3)]
Keep a record of each gap measurement performed as required by section A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

i. The date of measurement;

ii. The raw data obtained in the measurement;

iii. The calculations described in sections A.III.5 and A.III.6.

c. [60.115(b)(4)]
After each seal gap measurement that detects gaps exceeding the limitations specified by section A.III.7, submit a report to the Administrator as part of the next Periodic Report required by 40 CFR Part 63. The report will identify the

vessel and contain the information specified in sections A.IV.3.a.i through A.IV.3.a.iii, the date the vessel was emptied or the repairs made, and date of repair.

4. [63.640(n)(8)(iv) & 60.613b(b)(4)(iii)]
If an extension is utilized under section A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide the information in section A.IV.4.a below, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

   a. A demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      19 tons per year VOC emissions

      Applicable Compliance Method:

      If required, compliance shall be demonstrated using Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions, and records required by section A.III of the terms and conditions for this emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T175**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T175 is a 10,000 barrel fixed roof storage vessel identified as tank number PR-500091. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1044 as issued on 1/29/1997)	17 tons per year VOC See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, section A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See section A.III.1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia). This report shall be submitted within 30 days of occurrence.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 17 tons per year. This report shall be submitted by January 31 of each year for the previous calendar year.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      17 tons per year VOC emissions

      Applicable Compliance Method:

If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions; and the records required by section A.III of the terms and conditions for this emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T176**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T176 is a 10,000 barrel fixed roof storage vessel identified as tank number PR-500096. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	exempt See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1044 as issued on 1/29/1997)	17 tons per year volatile organic compounds (VOC) See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See section A.III.1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia). This report shall be submitted within 30 days of occurrence.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 17 tons per year VOC. This report shall be submitted by January 31 of each year for the previous calendar year.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      17 tons per year VOC emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions; and the records required by section A.III of the terms and conditions for this emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
T177 is a 30,000 barrel storage tank identified as PR-500776. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC	See sections A.I.2.g through A.I.2.j and Part II, sections A.63 through A.77.
	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, section A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1066 as issued on 7/2/1997)	9.04 tons per year volatile organic compounds (VOC)
		See sections A.I.2.c through A.I.2.f.
	40 CFR Part 60, Subpart Ka	See section A.I.2.a.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart K or Ka is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Ka.

2.d The fixed roof storage tank shall be equipped with an internal floating roof.

2.e The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open

when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.f All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.g Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 40 CFR 63.646(b) through 63.646(l) of Subpart CC.

2.h Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.i The permittee shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.j To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 40 CFR 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

   a. [40 CFR 63.120(a)(1)]
   The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(3), see paragraph b. of this section.

   b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
   For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

      i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

      ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

      iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily

accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. The permittee shall maintain records showing:

a. the type of material stored within the storage vessel;

b. the true vapor pressure of the stored material at maximum storage temperature; and

8. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]

The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 40 CFR 63.120(a)(3)(ii) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

5. The permittee shall submit a written deviation (excursion) report to the Toledo Division of Environmental Services when the annual VOC emissions exceed 9.04 tons per year VOC. If no deviations occurred during the annual period, then the permittee shall submit a report which states that no deviations occurred during that period. This report shall be submitted by January 31 of each year, or, it may be included as part of the Periodic Report.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      9.04 tons per year VOC emissions

      Applicable Compliance Method:

      If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions; and the records required by section A.III of the terms and conditions for this emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T178**

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
T178 is a 2,185 barrel internal floating roof storage vessel identified as tank number PR-500258. It is classified as a Group 1 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.b and Part II, sections A.4.a.
	OAC rule 3745-31-05(A)(3) (PTI 04-1144)	2.63 tons per year of volatile organic compounds (VOC) See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.
	40 CFR Part 60, Subpart Kb	See sections A.II.1 and A.II.2.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

2. A fixed roof in combination with an internal floating roof shall meet the following specifications [40 CFR 60.112b(a)(1)]:

   (a) [40 CFR 60.112b(a)(1)(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.

   (b) [40 CFR 60.112b(a)(1)(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:

      (i) [40 CFR 60.112b(a)(1)(ii)(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.

      (ii) [40 CFR 60.112b(a)(1)(ii)(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.

      (iii) [40 CFR 60.112b(a)(1)(ii)(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.

   (c) [40 CFR 60.112b(a)(1)(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.

   (d) [40 CFR 60.112b(a)(1)(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.

(e) [40 CFR 60.112b(a)(1)(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.

(f) [40 CFR 60.112b(a)(1)(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.

(g) [40 CFR 60.112b(a)(1)(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.

(h) [40 CFR 60.112b(a)(1)(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.

(i) [40 CFR 60.112b(a)(1)(ix)]
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 maintain records showing:

   a. the type of material stored within the storage vessel [40 CFR 60.116b(c)];

   b. the true vapor pressure of the stored material at maximum storage temperature [40 CFR 60.116b(c)]; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel [40 CFR 60.116b(b)].

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit [40 CFR 60.116b(a)]. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or

computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. [40 CFR 60.113b(a)(1)]
The permittee shall 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.

5. [40 CFR 60.113b(a)(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 40 CFR 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.

6. [40 CFR 60.113b(a)(3)]
For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B) [see A.II.2.(a).(ii)]:

   (a) [40 CFR 60.113b(a)(3)(i)
   Visually inspect the vessel as specified in paragraph (a)(4) [see A.III.7] of this section at least every 5 years; or

   (b) [40 CFR 60.113b(a)(3)(ii)]
   Visually inspect the vessel as specified in paragraph (a)(2) [see A.III.5] of this section.

7. [40 CFR 60.113b(a)(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) [see A.III.5 and A.III.6.(b)] of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) [see A.III.6.(a)] of this section.

8. [40 CFR 60.115b(a)]
After installing control equipment in accordance with 40 CFR 60.112b(a)(1) [see A.II.2] (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

(a) [40 CFR 60.115b(a)(2)]
Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4) [see A.III.4, 5, 6, and 7 of this section]. 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).

9. [40 CFR 60.116b(e)]
Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(a) [40 CFR 60.116b(e)(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.

(b) [40 CFR 60.116b(e)(2)]
For crude oil or refined petroleum products the vapor pressure may be obtainedby the following:

(i) [40 CFR 60.116b(e)(2)(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 40 CFR 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) [40 CFR 60.116b(e)(2)(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.

(c) [40 CFR 60.116b(e)(3)]
For other liquids, the vapor pressure:

(i) [40 CFR 60.116b(e)(3)(i)]
May be obtained from standard reference texts, or

(ii) [40 CFR 60.116b(e)(3)(ii)]
Determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or

(iii) [40 CFR 60.116b(e)(3)(iii)]
Measured by an appropriate method approved by the Administrator; or

(iv) [40 CFR 60.116b(e)(3)(iv)]
Calculated by an appropriate method approved by the Administrator.

10. [40 CFR 60.116b(f)]
The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(a) [40 CFR 60.116b(f)(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) [see A.III.9] of this section.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6

kPa (0.754 psia). This report shall be submitted within 30 days of occurrence.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 2.63 tons per year VOC. This report shall be submitted by January 31 of each year for the previous calendar year.

3. [40 CFR 60.113b(a)(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) [see A.III.4 and 7] of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) [see A.III.7] 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.

4. [40 CFR 60.115b(a)(1)]
Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1) [see A.II.2 and A.III.4 of this section]. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3) [see Part II, section A.166].

5. [40 CFR 60.115b(a)(3)]
If any of the conditions described in 40 CFR 60.113b(a)(2) [see A.III.5 of this section] are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2) [see A.III.5 of this section], 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.

6. [40 CFR 60.115b(a)(4)]
After each inspection required by 40 CFR 60.113b(a)(3) [see A.III.6 of this section] 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 40 CFR 60.113b(a)(3)(ii) [see A.III.6.(b) of this section], 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 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) [A.II.2 or A.III.6 of this section] and list each repair made.

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:

2.63 tons per year VOC emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions; and, the records required by section A.III of the terms and conditions for this emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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
T179 is a 23,376 gallon fixed roof storage vessel identified as tank number PR-500162.	OAC rule 3745-21-09(L)	exempt See section A.I.2.b and Part II, section A.4.a.
All fugitive emissions from gasoline blending are included with this storage tank.	40 CFR Part 63, Subpart CC	See section A.I.2.a and Part II, sections A.63 through A.77.

2. Additional Terms and Conditions

2.a The design storage capacity of this storage vessel is less than 177 cubic meters (46,763 gallons) and is defined as a Group 2 storage vessel under 40 CFR 63.641. Therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

2.b In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T180**

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
T180 is a 2,185.8 barrel fixed roof storage vessel identified as tank number PR-500253. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T181**

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
T181 is a 997.36 barrel fixed roof storage vessel identified as tank number PR-500254. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T182**

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
T182 is a 1000 barrel fixed roof storage vessel identified as tank number PR-500275. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T183**

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
T183 is a 3,798 barrel fixed roof storage vessel identified as tank number PR-500599. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T184**

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
T184 is a 997.1 barrel fixed roof storage vessel identified as tank number PR-500735. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T185**

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
T185 is a 1,600 barrel fixed roof storage vessel identified as tank number PR-500736. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See section A.I.2.a.
	40 CFR Part 63, Subpart CC	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the applicable requirements of OAC rule 3745-21-09(L) as specified in Part II, section A.4.a, and detailed in Part II, section A.202.

2.b The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.202.

II. Operational Restrictions

1. Refer to Part II, section A.202.b.

III. Monitoring and/or Record Keeping Requirements

1. Refer to Part II, section A.202.c.

IV. Reporting Requirements

1. Refer to Part II, section A.202.d.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **T186**

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
T186 is a 1,392 barrel internal floating roof storage vessel identified as tank number PR-500237. It is classified as a Group 1 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(L)	See sections A.I.2.a through A.I.2.c and Part II, section A.4.a.
	40 CFR Part 63, Subpart CC	See sections A.I.2.d through A.I.2.g, A.II.1 and Part II, sections A.63 through A.77.

2. Additional Terms and Conditions

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of 40 CFR Part 63, Subpart CC.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [see section A.II].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [see section A.III].

II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a

storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [see section A.I.2.f] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(2), see paragraph b. of this section.

b. [40 CFR 63.120(a)(2), (a)(2)(i) and (a)(2)(ii)]
For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in paragraphs i. and ii. of this section.

i. The permittee shall visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the seal each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(2). This exemption is found under 40 CFR 63.646(e)]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by 40 CFR 63.120(a)(2)(i) [see paragraph b. of this section], the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.i of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(2)(ii) [see paragraph b. of this

section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [see section A.III] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [see section A.III] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [see section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator | Toledo Division of Environmental Services

c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G [see section A.III] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(2)(i) [see section A.III], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall

include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [see section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [see section A.III]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(2)(ii) [see section A.III] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(2), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent

so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

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)

Emissions Unit ID: EFR, PR-500818 (T187)
Activity Description: Storage of Petroleum Liquids

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T187 is a 325,000-barrel external roof storage vessel with dual seals. The tank is identified as tank number PR-500818 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(Z)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3 (PTI 04-01329 as modified on May 13, 2004)	10.73 tons per year of volatile organic compound (VOC) emissions See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See sections A.I.2.a and A.I.2.d.
All fugitive emissions from the North tank farm are included with this storage tank.	40 CFR Part 60, Subpart Kb	See section A.II 1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

II. Operational Restrictions

1. The external floating roof must meet the following specifications:

   a. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

      i. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

      ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as otherwise allowed in A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by A.III.4.

   b. Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

   c. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

b. the true vapor pressure of the stored material at maximum storage temperature; and

c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years, except for the record required by A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year.

c. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of A.III.4.a and b.

5. The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32 cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

c. The total surface area of each gap described in A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in A.III.7.

7. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in A.III.7.a and b:

   a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81cm.

      i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61cm above the stored liquid surface.

      ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

   b. The secondary seal is to meet the following requirements:

      i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in A.III.7.c.

      ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

      iii. There are to be no holes, tears, or other openings in the seal or seal fabric.

   c. If a failure that is detected during inspections required in A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. The permittee shall notify the Director 30 days in advance of any gap measurements required by A.III.4 to afford the Director the opportunity to have an observer present.

9. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

   a. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the

storage vessel with VOL.

b. For all inspections required by A.III.9, the permittee shall notify the Director in writing at least 30 days prior to filling or refilling of each storage vessel to afford the Director the opportunity to inspect the storage vessel prior to refilling. If the inspection required A.III.9 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Director at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Director at least 7 days prior to the refilling.

10. If the permittee determines that it is unsafe to perform the seal gap measurements required by A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

IV. Reporting Requirements

1. This emissions unit is subject to the applicable provisions of Subpart Kb of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

c. actual start-up date (within 15 days after such date); and

d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Toledo Division of Environmental Services
348 South Erie Street
Toledo, Ohio 43602

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceeded 10.73 tons per year VOC.

3. If no deviations occurred during the annual period under A.IV.2, the permittee shall submit a report which states that no deviations occurred during that period.

4. The permittee shall also meet the following reporting requirements.

   a. Within 60 days of performing the initial fill seal gap measurement required by A.III.4, furnish the Director with a report that contains:

      i. the date of measurement;

      ii. the raw data obtained in the measurement; and

      iii. the calculations described in A.III.5 and 6.

   b. Keep a record of each gap measurement performed as required by A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

      i. the date of measurement;

      ii. the raw data obtained in the measurement; and

      iii. the calculations described in A.III.5 and 6.

   c. After each seal gap measurement that detects gaps exceeding the limitations specified by A.III.7, submit a report to the Director as part of the next periodic report required by 40 CFR Part 63. The report shall identify the vessel and contain the information specified

in paragraph A.IV.4.a.i through a.iii., the date the vessel was emptied or the repairs made, and date of repair.

5. If an extension is utilized under A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide 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, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

6. General reporting requirements:

   a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

   b. All requests, reports, applications, submittals, and other communications to the Director pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

   If acceptable to both the Director and the permittee, reports may be submitted on electronic media.

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:
   10.73 tons per year VOC emissions

   Applicable Compliance Method:

   If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or 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)

Emissions Unit ID: EFR, PR-500819 (T188)
Activity Description: Storage of Petroleum Liquids

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T188 is a 325,000-barrel external roof storage vessel with dual seals. The tank is identified as tank number PR-500819 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641.	OAC rule 3745-21-09(Z)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 04-01329 as modified on May 13, 2004)	10.73 tons per year of volatile organic compound (VOC) emissions See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See sections A.I.2.a and A.I.2.d.
	40 CFR Part 60, Subpart Kb	See section A.II.1.

2. Additional Terms and Conditions

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart CC as specified in Part II, sections A.63 through A.77, and detailed in Part II, section A.201.

II. Operational Restrictions

1. The external floating roof must meet the following specifications:

   a. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

      i. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

      ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as otherwise allowed in A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by A.III.4.

   b. Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

   c. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years, except for the record required by A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

    a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

    b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year.

    c. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of A.III.4.a and b.

5. The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

    a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

    b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32 cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

    c. The total surface area of each gap described in A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in A.III.7.

7. The permittee shall make necessary repairs or empty the storage vessel within 45 days of

identification in any inspection for seals not meeting the requirements listed in A.III.7.a and b:

a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81cm.

   i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61cm above the stored liquid surface.

   ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

b. The secondary seal is to meet the following requirements:

   i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in A.III.7.c.

   ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

   iii. There are to be no holes, tears, or other openings in the seal or seal fabric.

c. If a failure that is detected during inspections required in A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. The permittee shall notify the Director 30 days in advance of any gap measurements required by A.III.4 to afford the Director the opportunity to have an observer present.

9. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

   a. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

   b. For all inspections required by A.III.9, the permittee shall notify the Director in writing at least 30 days prior to filling or refilling of each storage vessel to afford the Director the opportunity to inspect the storage vessel prior to refilling. If the inspection required

A.III.9 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Director at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Director at least 7 days prior to the refilling.

10. If the permittee determines that it is unsafe to perform the seal gap measurements required by A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

    a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

    b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

IV. Reporting Requirements

1. This emissions unit is subject to the applicable provisions of Subpart Kb of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

   Pursuant to the 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. construction date (no later than 30 days after such date);

   b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

   c. actual start-up date (within 15 days after such date); and

   d. date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency

DAPC - Permit Management Unit
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Toledo Division of Environmental Services
348 South Erie Street
Toledo, Ohio 43602

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceeded 10.73 tons per year VOC.

3. If no deviations occurred during the annual period under A.IV.2, the permittee shall submit a report which states that no deviations occurred during that period.

4. The permittee shall also meet the following reporting requirements.

   a. Within 60 days of performing the initial fill seal gap measurement required by A.III.4, furnish the Director with a report that contains:

      i. the date of measurement;

      ii. the raw data obtained in the measurement; and

      iii. the calculations described in A.III.5 and 6.

   b. Keep a record of each gap measurement performed as required by A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

      i. the date of measurement;

      ii. the raw data obtained in the measurement; and

      iii. the calculations described in A.III.5 and 6.

   c. After each seal gap measurement that detects gaps exceeding the limitations specified by A.III.7, submit a report to the Director as part of the next periodic report required by 40 CFR Part 63. The report shall identify the vessel and contain the information specified in paragraph A.IV.4.a.i through a.iii., the date the vessel was emptied or the repairs made, and date of repair.

5. If an extension is utilized under A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide 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, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

6. General reporting requirements:

   a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

   b. All requests, reports, applications, submittals, and other communications to the Director pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

   If acceptable to both the Director and the permittee, reports may be submitted on electronic media.

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:

      10.73 tons per year VOC emissions

      Applicable Compliance Method:

      If required, compliance shall be demonstrated using: Tanks 4.0, the latest version of Tanks computer software, or equivalent AP-42 methodology issued by U.S. EPA for calculating tank emissions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not

exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None