OhioEPA

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

05/30/03

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

02-47-05-0278
Ross Incineration Services, Inc.
Arthur W. Hargate
36790 Giles Road
Grafton, OH 44044-9752

Dear Arthur W. Hargate:

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
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Northeast District Office.

Very truly yours,

Michael W. Ahern

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

cc: Northeast District Office
File, DAPC PMU

State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: **05/30/03**	Effective Date: **06/20/03**	Expiration Date: **06/20/08**

This document constitutes issuance of a Title V permit for Facility ID: 02-47-05-0278 to:
Ross Incineration Services, Inc.
36790 Giles Road
Grafton, OH 44044-9752

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

F001 (Roadway Dust)
Fugitive dust from roadways

N001 (Thermal Oxidizer)
Thermal Oxidizer # 7 = incinerator (main combustion chamber). Incineration system consists of rotary kiln, main combustion chamber, air pollution control equipment, closed loop scrubber water system, and ash management system

T018 (Storage Tank 23)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T019 (Storage Tank 24)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T020 (Storage Tank 25)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T021 (Storage Tank 26)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T022 (Storage Tank 27)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T023 (Storage Tank 28)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T024 (Storage Tank 29)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T025 (Storage Tank 30)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T026 (Storage Tank 31)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T027 (Storage Tank 32)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T028 (Storage Tank 33)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T029 (Storage Tank 34)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T030 (Storage Tank 35)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T031 (Storage Tank 36)
Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

T035 (Storage/Treatment Tank 70)
10,000 gallon condensation tank used as part of liquid vacuum system, vented to vapor recovery unit

T036 (Storage/Treatment Tank 73)
7,500 gallon vacuum tank used as part of liquid vacuum system, vented to Tank 70

T037 (Storage/Treatment Tank 74)
7,500 gallon vacuum tank used as part of liquid vacuum system, vented to Tank 70

T039 (Storage Tanks 37 - 50)
Tank Farm II - Fourteen (14) 9,920 gallon storage tanks for liquid wastes

T040 (Storage Tanks 51 - 64)
Tank Farm III - Fourteen (14) 9,920 gallon storage tanks for liquid wastes

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:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

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

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

(a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii)

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

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

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

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

iii. **For monitoring, record keeping, and reporting requirements:**
Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month

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

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

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

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

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

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

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

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

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

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

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

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

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

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as

provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

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

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1.a (Note: The terms and conditions derived directly from 40 CFR, Part 63, Subpart DD and 40 CFR, Part 61, Subpart FF are structured as in those applicable standards.)

40 CFR, Part 63, Subpart DD

40 CFR Section 63.680 Applicability and designation of affected sources

(a) The provisions of this subpart apply to the owner and operator of a plant site for which both of the conditions specified in paragraphs (a)(1) and (a)(2) of this section are applicable. If either one of these conditions does not apply to the plant site, then the owner and operator of the plant site are not subject to the provisions of this subpart

(1) The plant site is a major source of hazardous air pollutant (HAP) emissions as defined in 40 CFR 63.2

(2) At the plant site is located one or more of operations that receives off-site materials as specified in paragraph (b) of this section and the operations is one of the following waste management operations or recovery operations as specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section

(i) A waste management operation that receives off-site material and the operation is regulated as a hazardous waste treatment, storage, and disposal facility (TSDF) under either 40 CFR part 264 or part 265

(ii) A waste management operation that treats wastewater which is an off-site material and the operation is exempted from regulation as a hazardous waste treatment, storage, and disposal facility under 40 CFR 264.1(g)(6) or 40 CFR 265.1(c)(10)

(iii) A waste management operation that treats wastewater which is an off-site material and the operation meets both of the following conditions:

(A) The operation is subject to regulation under either section 402 or 307(b) of the Clean Water Act but is not owned by a "state" or "municipality" as defined by section 502(3) and 502(4), respectively, of the Clean Water Act; and

(B) The treatment of wastewater received from off-site is the predominant activity performed at the plant site

(iv) A recovery operation that recycles or reprocesses hazardous waste which is an off-site material and the operation is exempted from regulation as a hazardous waste treatment, disposal, and storage facility under 40 CFR 264.1(g)(2) or 40 CFR 265.1(c)(6).

(v) A recovery operation that recycles or reprocesses used solvent which is an off-site material and the operation is not part of a chemical, petroleum, or other manufacturing process that is required to use air emission controls by another subpart of 40 CFR part 63 or 40 CFR part 61.

(vi) A recovery operation that re-refines or reprocesses used oil which is an off-site material and the operation is regulated under 40 CFR 279 subpart F--Standards for Used Oil Processors and Refiners.

A. State and Federally Enforcable Section (continued)

1.b 40 CFR Section 63.680 Applicability and designation of affected sources (continued)

(b) For the purpose of implementing this subpart, an off-site material is a material that meets all of the criteria specified in paragraph (b)(1) of this section but is not one of the materials specified in paragraph (b)(2) of this section.

(1) An off-site material is a material that meets all of the criteria specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section. If any one of these criteria do not apply to the material, then the material is not an off-site material subject to this subpart.

(i) The material is a waste, used oil, or used solvent as defined in Sec. 63.681 of this subpart;

(ii) The waste, used oil, or used solvent is not produced or generated within the plant site, but the material is delivered, transferred, or otherwise moved to the plant site from a location outside the boundaries of the plant site; and

(iii) The waste, used oil, or used solvent contains one or more of the hazardous air pollutants (HAP) listed in Table 1 of this subpart based on the composition of the material at the point-of-delivery, as defined in Sec. 63.681 of this subpart.

(2) For the purpose of implementing this subpart, the following materials are not off-site materials:

(i) Household waste as defined in 40 CFR 258.2.

(ii) Radioactive mixed waste managed in accordance with all applicable regulations under Atomic Energy Act and Nuclear Waste Policy Act authorities.

(iii) Waste that is generated as a result of implementing remedial activities required under the Resource Conservation and Recovery Act (RCRA) corrective action authorities (RCRA sections 3004(u), 3004(v), or 3008(h)), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorities, or similar Federal or State authorities.

(iv) Waste containing HAP that is generated by residential households (e.g., old paint, home garden pesticides) and subsequently is collected as a community service by government agencies, businesses, or other organizations for the purpose of promoting the proper disposal of this waste.

(v) Waste that is transferred from a chemical manufacturing plant or other facility for which both of the following conditions apply to the waste:

(A) The management of the waste at the facility is required either under part 63 subpart F--National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry or under another subpart in 40 CFR part 63 to meet the air emission control standards for process wastewater specified in 40 CFR 63.132 through 63.147; and

(B) The owner or operator of the facility from which the waste is transferred has complied with the provisions of 40 CFR 63.132(g)(1)(ii) and (g)(2).

(vi) Waste that is transferred from a chemical manufacturing plant, petroleum refinery, or coke by-product recovery plant which is subject to 40 CFR part 61, subpart FF--National Emission Standards for Benzene Waste Operations, and for which both of the following conditions apply to the waste:

(A) The waste is generated at a facility that is not exempted under the provisions of 40 CFR 61.342(a) from meeting the air emission control standards of 40 CFR part 61, subpart FF; and

(B) The owner or operator of the facility from which the waste is transferred has complied with the provisions of 40 CFR 61.342(f)(2).

(vii) Ship ballast water pumped from a ship to an onshore wastewater treatment facility.

(viii) Hazardous waste that is stored for 10 days or less at a transfer facility in compliance with the provisions of 40 CFR 263.12.

A. State and Federally Enforcable Section (continued)

1.c 40 CFR Section 63.680 Applicability and designation of affected sources (continued)

(c) Affected sources.

(1) Off-site material management units. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of off-site material management units associated with the operation. An off-site material management unit is a tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to manage off-site material. For the purpose of implementing the standards under this subpart, a unit that meets the definition of a tank or container but also is equipped with a vent that serves as a process vent for any of the processes listed in paragraphs (c)(2)(i) through (c)(2)(vi) of this section is not an off-site material management unit but instead is a process vent and is to be included in the appropriate affected source group under paragraph (c)(2) of this section. Examples of such a unit may include, but are not limited to, a distillate receiver vessel, a primary condenser, a bottoms receiver vessel, a surge control tank, a separator tank, and a hot well.

(2) Process vents. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source ids the entire group of process equipment associated with the process vents for the processes listed in paragraphs (c)(2)(i) through(c)(2)(vi) of this section.

(i) Distillation process used for the treatment, recycling, or recovery of off-site material. Distillation means a process, either batch or continuous, separating one or more off-site material feed streams into two or more exit streams having different component concentrations from those in the feed stream or streams. The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

(ii) Fractionation process used for the treatment, recycling or recovery of off-site material. Fractionation means liquid mixture separation process or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

(iii) Thin-film evaporation process used for the treatment, recycling, or recovery of off-site material. Thin-film evaporation means a liquid mixture separation process or method that uses a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal, or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

(iv) Solvent extraction process used for the treatment, recycling, or recovery of off-site material. Solvent extraction means a separation process or method in which a solid or a solution is contacted with a liquid solvent (the material and the solvent being relatively insoluble in each other) to preferentially dissolve and transfer one or more components into the solvent.

A. State and Federally Enforcable Section (continued)

(v) Steam stripping process used for the treatment, recycling, or recovery of off-site material. Steam stripping means a liquid mixture separation process or method in which vaporization of the volatile components of a liquid mixture occurs by the introduction of steam directly into the process.
(vi) Gas stripping process used for the treatment, recycling, or recovery of off-site material. Gas stripping means a desorption process or methed used to transfer one or more volatile volatile components from a liquid mixture into a gas stream either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are examples of the process configurations used for contacting the gas and a liquid.

(3) Equipment leaks. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of equipment components for which each component meets all of the conditions specified in paragraphs (c)(3)(i) through (c)(3)(iii) of this section. If any one of these conditions do not apply to an equipment component, then that component is not part of the affected source for equipment leaks.

(i) The equipment component is a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system;

(ii) The equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight; and

(iii) The equipment component is intended to operate for 300 hours or more during a calendar year in off-site material service, as defined in Sec. 63.681 of this subpart.

1.d 40 CFR Section 63.680 Applicability and designation of affected sources (continued)

(d) Facility-wide exemption. The owner or operator of affected sources subject to this subpart is exempted from the requirements of Secs. 63.682 through 63.699 of this subpart in situations when the total annual quantity of the HAP that is contained in the off-site material received at the plant site is less than 1 megagram per year. For a plant site to be exempted under the provisions of this paragraph (d), the owner or operator must meet the requirements in paragraphs (d)(1) through (d)(3) of this section.

(1) The owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material received at the plant site. This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point-of-delivery for each off-site material stream.

(2) The owner or operator must prepare a new determination whenever the extent of changes to the quantity or composition of the off-site material received at the plant site could cause the total annual HAP quantity in the off-site material received at the plant site to exceed the limit of 1 megagram per year.

(3) The owner or operator must maintain documentation to support the owner's or operator's determination of the total annual HAP quantity in the off-site material received at the plant site. This documentation must include the basis and data used for determining the HAP content of the off-site material.

A. State and Federally Enforcable Section (continued)

1.e 40 CFR Section 63.680 Applicability and designation of affected sources (continued)

(e) Compliance dates.

(1) Existing sources. The owner or operator of an affected source that commenced construction or reconstruction before October 13, 1994, must achieve compliance with the provisions of this subpart on or before the date specified in paragraph (e)(1)(i) or (e)(1)(ii) of this section as applicable to the affected source.

(i) For an affected source that commenced construction or reconstruction before October 13, 1994 and receives off-site material for the first time before February 1, 2000, the owner or operator of this affected source must achieve compliance with the provisions of the subpart on or before February 1, 2000 unless an extension has been granted by the Administrator as provided in 40 CFR 63.6(i).

(ii) For an affected source that commenced construction or reconstruction before October 13, 1994, but receives off-site material for the first time on or after February 1, 2000, the owner or operator of the affected source must achieve compliance with the provisions of this subpart upon the first date that the affected source begins to manage off-site material.

(2) New sources. The owner or operator of an affected source for which construction or reconstruction commences on or after October 13, 1994, must achieve compliance with the provisions of this subpart on or before July 1, 1996, or upon initial startup of operations, whichever date is later as provided in 40 CFR 63.6(b).

(f) The provisions of 40 CFR part 63, subpart A--General Provisions that apply and those that do not apply to this subpart are specified in Table 2 of this subpart.

2.a 40 CFR Section 63.683 Standards: General

(a) The general standards under this section apply to owners and operators of affected sources as designated in Sec. 63.680(c) of this subpart.

(b) Off-site material management units.

(1) For each off-site material management unit that is part of an affected source, the owner or operator must meet the requirements in either paragraph (b)(1)(i), (b)(1)(ii), or (b)(1)(iii) of this section except for those off-site material management units exempted under paragraph (b)(2) of this section.

(i) The owner or operator controls air emissions from the off-site material management unit in accordance with the applicable standards specified in Secs. 63.685 through 63.689 of this subpart.

(ii) The owner or operator removes or destroys HAP in the off-site material before placing the material in the off-site material management unit by treating the material in accordance with the standards specified in Sec. 63.684 of this subpart.

(iii) The owner or operator determines before placing off-site material in the off-site material management unit that the average VOHAP concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in Sec. 63.694(b) of this subpart. This initial determination must be performed either before the first time any portion of the off-site material stream is placed in the unit or by the compliance date, whichever date is later. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

A. State and Federally Enforcable Section (continued)

(2) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section when the owner or operator meets one of the exemptions provided in paragraphs (b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit.

(i) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR part 63 or 40 CFR part 61, and the owner or operator is controlling the HAP listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under part 61 or part 63.

(ii) At the discretion of the owner or operator, one or a combination of off-site material management units may be exempted from the requirements in paragraph (b)(1) of this section when these units meet the condition that the total annual quantity of HAP contained in the off-site material placed in the units exempted under this paragraph (b)(2)(ii) is less than 1 megagram per year. For the off-site material management units selected by the owner or operator to be exempted from the requirements in paragraph (b)(1) of this section, the owner or operator must meet the requirements in paragraphs (b)(2)(ii)(A) and (b)(2)(ii)(B) of this section. An owner or operator may change the off-site material management units selected to be exempted under this paragraph (b)(2)(ii) by preparing a new designation for the exempt-units as required by paragraph (b)(2)(ii)(A) of this section and performing a new determination as required by paragraph (b)(2)(ii)(B) of this section.

(A) The owner or operator must designate each of the off-site material management units selected by the owner or operator to be exempt under paragraph (b)(2)(ii) of this section by either submitting to the Administrator a written notification identifying the exempt-units or permanently marking the exempt-units at the plant site. If an owner or operator chooses to prepare and submit a written notification, this notification must include a site plan, process diagram, or other appropriate documentation identifying each of the exempt-units. If an owner or operator chooses to permanently mark the exempt-units, each exempt-unit must be marked in such a manner that it can be readily identified as an exempt-unit from the other off-site material management units located at the plant site.

(B) The owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material placed in the units exempted under this paragraph (b)(2)(ii). This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point where the off-site material is placed in each exempted unit. The owner or operator must perform a new determination whenever the extent of changes to the quantity or composition of the off-site material placed in the exempted units could cause the total annual HAP content in the off-site material to exceed 1 megagram per year. The owner or operator must maintain documentation to support the most recent determination of the total annual HAP quantity. This documentation must include the basis and data used for determining the HAP content of the off-site material.

(iii) A tank or surface impoundment is exempted from the requirements in paragraph (b)(1) of this section if the unit is used for a biological treatment process that meets the requirements in either paragraph (b)(2)(iii)(A) or (b)(2)(iii)(B) of this section and the owner or operator complies with the monitoring requirements in Sec. 63.684(e)(4) of this subpart.

(A) The HAP biodegradation efficiency (Rbio) for the biological treatment process is equal to or greater than 95 percent. The HAP biodegradation efficiency (Rbio) shall be determined in accordance with the requirements of Sec. 63.694(h) of this subpart.

(B) The total actual HAP mass removal rate (MRbio) for the off-site material treated by the biological treatment process is equal to or greater than the required HAP mass removal rate (RMR) for the off-site material. The total actual HAP mass removal rate (MRbio) must be determined in accordance with the requirements of Sec. 63.694(i) of this subpart. The required HAP mass removal rate (RMR) must be determined in accordance with the requirements of Sec. 63.694(e) of this subpart.

(iv) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material placed in the unit is a hazardous waste that meets the conditions specified in either paragraph (b)(2)(iv)(A) or (b)(2)(iv)(B) of this section.

(A) The hazardous waste meets the numerical organic concentration limits, applicable to the hazardous waste, as specified in 40 CFR part 268--Land Disposal Restrictions, listed in the table, "Treatment Standards for Hazardous Waste" in 40 CFR 268.40.

A. State and Federally Enforcable Section (continued)

(B) The organic hazardous constituents in the hazardous waste have been treated by the treatment technology established by the EPA for the hazardous waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by the EPA under 40 CFR 268.42(b).

(v) A tank used for bulk feed of off-site material to a waste incinerator is exempted from the requirements specified in paragraph (b)(1) of this section if the tank meets all of the conditions specified in paragraphs (b)(2)(v)(A) through (b)(2)(v)(C) of this section.

(A) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under 40 CFR part 61, subpart FF--National Emission Standards for Benzene Waste Operations for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams per year;

(B) The enclosure and control device serving the tank were installed and began operation prior to July 1, 1996; and

(C) The enclosure is 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" under 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 or electrical equipment; or to direct air flow into the enclosure. The owner or operator must annually perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure."

2.b 40 CFR Section 63.683 Standards: General (continued)

(c) Process vents.

(1) For each process vent that is part of an affected source, the owner or operator must meet the requiremets in either paragraph (c)(1)(i) or (c)(1)(ii) of this section except for those process vents exempted under paragraph (c)(2) of this section.

(i) The owner or operator controls air emissions from the process vent in accordance with the standards specified in sec. 63.690 of this suboart.

(ii) The owner or operator determines before placing off-site material in the process equipment associated with the process vent that the average VOHAP concentration of the off-site materials is less than ppmw at the point-of-delivery. The owner of operator must perform an initial determination of the average of the average VOHAP concentrationof the oss-site material using the procedures specified in Sec. 63.694(b) of this subpart before any portion of the off-site materials stream is placed in the unit. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(2) A process vent is exempted from the requirements of paragraph (c)(1) of this section when the owner or operator meets one of the exemptions provided in paragraphs (c)(2)(i) through (c)(2)(iii) of this section.

(i) A process vent is exempted from the requirements in paragraph (c)(1) of this section if the process vent is also subject to another subpart under part 63 or 40 CFR part 61, and the owner or operator is controlling the HAP listed in Table 1 of this subpart that are emitted from the process vent in compliance with the provisions specified in the other applicable subpart under part 61 or part 63.

(ii) A process vent is exempted from the requirements specified in paragraph (c)(1) of this section if the owner or operator determines that the process vent stream flow rate is less than 0.005 cubic meters per minute (m3/min) at standard conditions (as defined in 40 CFR 63.2). The process vent stream flow rate shall be determined in accordance with the procedures specified in Sec. 63.694(m) of this subpart. Documentation must be prepared by the owner or operator and maintained at the plant site to support the determination of the process vent stream flow rate. This documentation must include identification of each process vent exempted under this paragraph and the test results used to determine the process vent stream flow rate.

A. State and Federally Enforcable Section (continued)

(iii) A process vent is exempted from the requirements specified in paragraph (c)(1) of this section if the owner or operator determines that the process vent stream flow rate is less than 6.0 m 3/min at standard conditions (as defined in 40 CFR 63.2) and the total HAP concentration is less than 20 ppmv. The process vent stream flow rate and total HAP concentration shall be determined in accordance with the procedures specified in Sec. 63.694(m) of this subpart. Documentation must be prepared by the owner or operator and maintained at the plant site to support the determination of the process vent stream flow rate and total HAP concentration. This documentation must include identification of each process vent exempted under this paragraph (c)(2)(iii) and the test results used to determine the process vent stream flow rate and total HAP concentration. The owner or operator must perform a new determination of the process vent stream flow rate and total HAP concentration when the extent of changes to operation of the unit on which the process vent is used could cause either the process vent stream flow rate to exceed the limit of 6.0 m3/min or the total HAP concentration to exceed the limit of 20 ppmv.

2.c 40 CFR Section 63.683 Standards: General (continued)

(d) Equipment leaks. The owner or operator must control equipment leaks from each equipment component that is part of the affected source specified in Sec. 63.680(c)(3) of this subpart by implementing leak detection and control measures in accordance with the standards specified in Sec. 63.691 of this subpart.

3.a 40 CFR Section 63.684: Standards: Off-site material treatment.

(a) The provisions of this section apply to the treatment of off-site material to remove or destroy HAP for which 63.683(b)(1)(ii) of this subpart references the requirements of this section for such treatment.

(b) The owner or operator shall remove or destroy the HAP contained in off-site material streams to be managed in the off-site material management unit in accordance with 63.683(b)(1)(ii) of this subpart using a treatment process that continuously achieves, under normal operations, one or more of the performance levels specified in paragraphs (b)(1) through (b)(5) of this section (as applicable to the type of treatment process) for the range of off-site material stream compositions and quantities expected to be treated.

(1) VOHAP concentration. The treatment process shall reduce the VOHAP concentration of the off-site material using a means, other than by dilution, to achieve one of the following performance levels, as applicable:

(i) In the case when every off-site material stream entering the treatment process has an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery, then the VOHAP concentration of the off-site material shall be reduced to a level that is less than 500 ppmw at the point-of-treatment.

(ii) In the case when off-site material streams entering the treatment process are a mixture of off-site material streams having an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery with off-site material streams having average VOHAP concentrations less than 500 ppmw at the point-of-delivery, then the VOHAP concentration of the off-site material must be reduced to a level at the point-of-treatment that meets the performance level specified in either paragraph (b)(1)(ii)(A) or (B) of this section.

A. State and Federally Enforcable Section (continued)

(A) Less than the VOHAP concentration limit (CR) established for the treatment process using the procedure specified in 63.694(d); or

(B) Less than the lowest VOHAP concentration determined for each of the off-site material streams entering the treatment process as determined by the VOHAP concentration of the off-site material at the point-of-delivery.

(2) HAP mass removal. The treatment process shall achieve a performance level such that the total quantity of HAP actually removed from the off-site material stream (MR) is equal to or greater than the required mass removal (RMR) established for the off-site material stream using the procedure specified in 63.694(e) of this subpart. The MR for the off-site material streams shall be determined using the procedures specified in 63.694(f) of this subpart.

(3) HAP reduction efficiency. For any treatment process except a treatment process that uses biological degradation and is performed in an open tank or surface impoundment, the treatment process must achieve the applicable performance level specified in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.

(i) In the case when the owner or operator determines that off-site material stream entering the treatment process has an average VOHAP concentration less than 10,000 ppmw at the point-of-delivery, then the treatment process shall achieve a performance level such that the total quantity of HAP in the off-site material stream is reduced by 95 percent or more. The HAP reduction efficiency (R) for the treatment process shall be determined using the procedure specified in 63.694(g) of this subpart. The average VOHAP concentration of the off-site material stream at the point-of-delivery shall be determined using the procedure specified in 63.694(b) of this subpart.

(ii) In the case when the off-site material stream entering the treatment process has an average VOHAP concentration equal to or greater than 10,000 ppmw at the point-of-delivery, then the treatment process shall achieve a performance level such that the total quantity of HAP in the off-site material stream is reduced by 95 percent or more, and the average VOHAP concentration of the off-site material at the point-of-treatment is less than 100 parts per million by weight (ppmw). The HAP reduction efficiency (R) for the treatment process shall be determined using the procedure specified in 63.694(g) of this subpart. The average VOHAP concentration of the off-site material stream at the point-of-treatment shall be determined using the procedure specified in 63.694(c) of this subpart.

(4) Biological degradation performed in an open tank or surface impoundment. A treatment process using biological degradation and performed in an open tank or surface impoundment must achieve the performance level specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.

(i) The HAP reduction efficiency (R) for the treatment process is equal to or greater than 95 percent, and the HAP biodegradation efficiency (Rbio) for the treatment process is equal to or greater than 95 percent. The HAP reduction efficiency (R) shall be determined using the procedure specified in 63.694(g) of this subpart. The HAP biodegradation efficiency (Rbio) shall be determined in accordance with the requirements of 63.694(h) of this subpart.

A. State and Federally Enforcable Section (continued)

(ii) The total quantity of HAP actually removed from the off-site material stream by biological degradation (MRbio) shall be equal to or greater than the required mass removal (RMR) established for the off-site material stream using the procedure specified in 63.694(e) of this subpart. The MRbio of the off-site material stream shall be determined using the procedures specified in 63.694(i) of this subpart.

(5) Incineration. The treatment process must destroy the HAP contained in the off-site material stream using one of the combustion devices specified in paragraphs (b)(5)(i) through (b)(5)(iv) of this section.

(i) An incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270, and the incinerator is designed and operated in accordance with the requirements of 40 CFR part 264, subpart O -- Incinerators, or

(ii) An incinerator for which the owner or operator has certified compliance with the interim status requirements of 40 CFR part 265, subpart O -- Incinerators.

(iii) A boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270, and the combustion unit is designed and operated in accordance with the requirements of 40 CFR part 266, subpart H -- Hazardous Waste Burned in Boilers and Industrial Furnaces.

(iv) A boiler or industrial furnace for which the owner or operator has certified compliance with the interim status requirements of 40 CFR part 266, subpart H Hazardous Waste Burned in Boilers and Industrial Furnaces.

3.b 40 CFR Section 63.684 Standards: Off-site material treatment (continued)

(c) For a treatment process that removes the HAP from the off-site material by a means other than thermal destruction or biological degradation to achieve one of the performances levels specified in paragraph (b)(1), (b)(2), or (b)(3) of this section, the owner or operator shall manage the HAP removed from the off-site material in such a manner to minimize release of these HAP to the atmosphere, to the extent practical. Examples of HAP emission control measures that meet the requirements of this paragraph include managing the HAP removed from the off-site material in units that use air emission controls in accordance with the standards specified in 63.685 through 63.689 of this subpart, as applicable to the unit.

3.c 40 CFR Section 63.684 Standards: Off-site material treatment (continued)

(d) When the owner or operator treats the off-site material to meet one of the performance levels specified in paragraphs (b)(1) through (b)(4) of this section, the owner or operator shall demonstrate that the treatment process achieves the selected performance level for the range of expected off-site material stream compositions expected to be treated. An initial demonstration shall be performed as soon as possible but no later than 30 days after first time an owner or operator begins using the treatment process to manage off-site material streams in accordance with the requirements of either 63.683(b)(1)(ii) or 63.683(b)(2)(ii) of this subpart as applicable to the affected off-site material management unit or process equipment. Thereafter, the owner or operator shall review and update, as necessary, this demonstration at least once every calendar year following the date of the initial demonstration.

A. State and Federally Enforcable Section (continued)

3.d 40 CFR Section 63.684 Standards: Off-site material treatment (continued)

(e) When the owner or operator treats the off-site material to meet one of the performance levels specified in paragraphs (b)(1) through (b)(4) of this section, the owner or operator shall ensure that the treatment process is achieving the applicable performance requirements by continuously monitoring the operation of the process when it is used to treat off-site material by complying with paragraphs (e)(1) through (e)(3) or, for biological treatment units, paragraph (e)(4) of this section:

(1) A continuous monitoring system shall be installed and operated for each treatment that measures operating parameters appropriate for the treatment process technology. This system shall include a continuous recorder that records the measured values of the selected operating parameters. The monitoring equipment shall be installed, calibrated, and maintained in accordance with the equipment manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly. The continuous recorder shall be a data recording device that records either an instantaneous data value at least once every 15 minutes or an average value for intervals of 15 minutes or less.

(2) For each monitored operating parameter, the owner or operator shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the treatment process must be operated to continuously achieve the applicable performance requirements of this section.

(3) When the treatment process is operating to treat off-site material, the owner or operator shall inspect the data recorded by the continuous monitoring system on a routine basis and operate the treatment process such that the actual value of each monitored operating parameter is greater than the minimum operating parameter value or less than the maximum operating parameter value, as appropriate, established for the treatment process.

(4) When the treatment process is a biological treatment process that is complying with paragraph (b)(4) of this section, the owner or operator must establish and implement a written procedure to monitor the appropriate parameters that demonstrate proper operation of the biological treatment unit in accordance with the evaluation required in 63.694(h) of this subpart. The written procedure must list the operating parameters that will be monitored and state the frequency of monitoring to ensure that the biological treatment unit is operating between the minimum operating parameter values and maximum operating parameter values to establish that the biological treatment unit is continuously achieving the performance requirement.

(f) The owner or operator must maintain records for each treatment process in accordance with the requirements of 63.696(a) of this subpart.

(g) The owner or operator must prepare and submit reports for each treatment process in accordance with the requirements of 63.697(a) of this subpart.

(h) The Administrator may at any time conduct or request that the owner or operator conduct testing necessary to demonstrate that a treatment process is achieving the applicable performance requirements of this section. The testing shall be conducted in accordance with the applicable requirements of this section. The Administrator may elect to have an authorized representative observe testing conducted by the owner or operator.

A. State and Federally Enforcable Section (continued)

4.a 40 CFR Section 63.685 Standards: Tanks

(a) The provisions of this section apply to the control of air emissions from tanks for which Sec. 63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air emissions from each tank subject to this section in accordance with the following applicable requirements:

(1) For a tank that is part of an existing affected source but the tank is not used to manage off-site material having a maximum HAP vapor pressure kilopascal (kPa) that is equal to or greater than 76.6 kPa nor is the tank used for a waste stabilization process as defined in Sec. 63.681 of this subpart, the owner or operator shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 3 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 3 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this section. The owner or operator shall control air emissions from a tank required by Table 3 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(2) For a tank that is part of a new affected source but the tank is not used to manage off-site material having a maximum HAP vapor pressure that is equal to or greater than 76.6 kPa nor is the tank used for a waste stabilization process as defined in Sec. 63.681 of this subpart, the owner or operator shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 4 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 4 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this section. The owner or operator shall control air emissions from a tank required by Table 4 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(3) For a tank that is used for a waste stabilization process, the owner or operator shall control air emissions from the tank by using Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(4) For a tank that manages off-site material having a maximum HAP vapor pressure that is equal to or greater than 76.6 kPa, the owner or operator must control air emissions by using one of the tanks specified in paragraphs (b)(4)(i) through (b)(4)(iii) of this section.

(i) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;

(ii) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or

(iii) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in paragraph (i) of this section.

A. State and Federally Enforcable Section (continued)

4.b 40 CFR Section 63.685 Standards: Tanks (continued)

(c) Owners and operators controlling air emissions from a tank using Tank Level 1 controls shall meet the following requirements:

(1) The owner or operator shall determine the maximum HAP vapor pressure for an off-site material to be managed in the tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in Sec. 63.694(j) of this subpart. Thereafter, the owner or operator shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of this subpart, as applicable to the tank.

(2) The owner or operator must control air emissions from the tank in accordance with the requirements in either paragraph (c)(2)(i), (c)(2)(ii), or (c)(2)(iii) of this section, as applicable to the tank.

(i) The owner or operator controls air emissions from the tank in accordance with the provisions specified in subpart 00 of 40 CFR part 63--National Emission Standards for Tanks--Level 1.

(ii) As an alternative to meeting the requirements in paragraph (c)(2)(i) of this section, an owner or operator may control air emissions from the tank in accordance with the provisions for Tank Level 2 controls as specified in paragraph (d) of this section.

(iii) As an alternative to meeting the requirements in paragraph (c)(2)(i) of this section when a tank is used as an interim transfer point to transfer off-site material from containers to another off-site material management unit, an owner or operator may control air emissions from the tank in accordance with the requirements in paragraphs (c)(2)(iii)(A) and (c)(2)(iii)(B) of this section. An example of such a tank is an in-ground tank into which organic-contaminated debris is dumped from roll-off boxes or dump trucks, and then this debris is promptly transferred from the tank to a macroencapsulation unit by a backhoe.

(A) During those periods of time when the material transfer activity is occurring, the tank may be operated without a cover.

(B) At all other times, air emissions from the tank must be controlled in accordance with the provisions specified in 40 CFR part 67, subpart 00--National Emission Standards for Tanks--Level 1.

4.c 40 CFR Section 63.685 Standards: Tanks (continued)

(d) Owners and operators controlling air emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in paragraph (e) of this section;

(2) A tank equipped with an external floating roof in accordance with the requirements specified in paragraph (f) of this section;

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;

(4) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or

(5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in paragraph (i) of this section.

A. State and Federally Enforcable Section (continued)

4.d 40 CFR Section 63.685 Standards: Tanks (continued)

(e) The owner or operator who elects to control air emissions from a tank using a fixed-roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (e)(3) of this section.

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in Sec. 63.681 of this subpart; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) 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.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall be gasketed.

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

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) 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.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed (i.e., no visible gaps). Rim spaces vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The owner or operator shall inspect the internal floating roof in accordance with the procedures specified in Sec. 63.695(b) of this subpart.

A. State and Federally Enforcable Section (continued)

4.e 40 CFR Section 63.685 Standards: Tanks (continued)

(f) The owner or operator who elects to control tank emissions by using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (f)(3) of this section.

(1) The owner or operator shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in Sec. 63.681 of this subpart. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal shall be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters (24 inches) above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters (cm\2\) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters (cm).

(iii) The external floating roof shall be meet the following specifications:

A. State and Federally Enforcable Section (continued)

(A) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float wells shall be equipped with covers designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vents shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the surface from the atmosphere.

(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) 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.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device must be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well must be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The owner or operator shall inspect the external floating roof in accordance with the procedures specified in Sec. 63.695(b) of this subpart.

A. State and Federally Enforcable Section (continued)

4.f 40 CFR Section 63.685 Standards: Tanks (continued)

(g) The owner or operator who controls tank air emissions by venting to a control device shall meet the requirements specified in paragraphs (g)(1) through (g)(3) of this section.

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Sec. 63.693 of this subpart.

(2) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of the tank.

(ii) Opening of a safety device, as defined in Sec. 63.681 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the procedures specified in Sec. 63.695 of this subpart.

A. State and Federally Enforcable Section (continued)

4.g 40 CFR Section 63.685 Standards: Tanks (continued)

(h) The owner or operator who elects to control tank air emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Sec. 63.694(k) of this subpart.

(3) Whenever an off-site material is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except under either of the following conditions as specified in paragraph (h)(3)(i) or (h)(3)(ii) of this section.

(i) At those times when opening of a safety device, as defined in Sec. 63.681 of this subpart, is required to avoid an unsafe condition.

(ii) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Sec. 63.693 of this subpart.

4.h 40 CFR Section 63.685 Standards: Tanks (continued)

(i) The owner or operator who elects to control air emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in paragraphs (i)(1) through (i)(4) of this section.

(1) The tank shall be located inside an enclosure. The enclosure shall 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" under 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 to direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall 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 Sec. 63.693 of this subpart.

(3) Opening of a safety device, as defined in Sec. 63.681 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

(4) The owner or operator shall inspect and monitor the closed-vent system and control device as specified in Sec. 63.693.

A. State and Federally Enforcable Section (continued)

5. 40 CFR, Section 63.686: Oil-water and organic-water separators

(a) The provisions of this section apply to the control of air emissions from oil-water separators and organic-water separators for which 63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air emissions from each separator subject to this section by using one of the following:

(1) A floating roof in accordance with all applicable provisions specified in 40 CFR 63 subpart VV -- National Emission Standards for Oil-Water Separators and Organic-Water Separators. For portions of the separator where it is infeasible to install and operate a floating roof, such as over a weir mechanism, the owner or operator shall comply with the requirements specified in paragraph (b)(2) of this section.

(2) A fixed-roof that is vented through a closed-vent system to a control device in accordance with all applicable provisions specified in 40 CFR 63 subpart VV -- National Emission Standards for Oil-Water Separators and Organic-Water Separators.

(3) A pressurized separator that operates as a closed system in accordance with all applicable provisions specified in 40 CFR part 63, subpart VV -- National Emission Standards for Oil-Water Separators and Organic-Water Separators.

6. 40 CFR, Section 63.687: Surface impoundments

(a) The provisions of this section apply to the control of air emissions from surface impoundments for which 63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air emissions from each surface impoundment subject to this section by using one of the following:

(1) A floating membrane cover in accordance with the applicable provisions specified in 40 CFR 63 subpart QQ -- National Emission Standards for Surface Impoundments; or

(2) A cover that is vented through a closed-vent system to a control device in accordance with all applicable provisions specified in 40 CFR 63 subpart QQ -- National Emission Standards for Surface Impoundments.

7.a 40 CFR, Section 63.688: Containers

(a) The provisions of this section apply to the control of air emissions from containers for which 63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air emissions from each container subject to this section in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in paragraph (c) of this section apply to the container.

(1) For a container having a design capacity greater than 0.1 m 3 and less than or equal to 0.46 m 3, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(1)(i) or (b)(1)(ii) of this section.

(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 1 controls as specified in 40 CFR part 63, subpart PP -- National Emission Standards for Containers.

(ii) As an alternative to meeting the requirements in paragraph (b)(1)(i) of this section, an owner or operator may choose to control air emissions from the container in accordance with the standards for either Container Level 2 controls or Container Level 3 controls as specified in subpart PP of this part 63 -- National Emission Standards for Containers.

(2) For a container having a design capacity greater than 0.46 m 3 and the container is not in light-material service as defined in 63.681 of this subpart, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(1)(i) or (b)(1)(ii) of this section.

A. State and Federally Enforcable Section (continued)

(3) For a container having a design capacity greater than 0.46 m 3 and the container is in light-material service as defined in 63.681 of this subpart, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.

(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 2 controls as specified in 40 CFR part 63, subpart PP -- National Emission Standards for Containers.

(ii) As an alternative to meeting the requirements in paragraph (b)(3)(i) of this section, an owner or operator may choose to control air emissions from the container in accordance with the standards for Container Level 3 controls as specified in 40 CFR part 63, subpart PP -- National Emission Standards for Containers.

7.b 40 CFR, Section 63.688: Containers (continued)

(c) When a container subject to this subpart and having a design capacity greater than 0.1 m 3 is used for treatment of an off-site material by a waste stabilization process as defined in 63.681 of this subpart, the owner or operator shall control air emissions from the container at those times during the process when the off-site material in the container is exposed to the atmosphere in accordance with the standards for Container Level 3 controls as specified in 40 CFR part 63, subpart PP -- National Emission Standards for Containers.

8.a 40 CFR, Section 63.689: Transfer systems

(a) The provisions of this section apply to the control of air emissions from transfer systems for which 63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) For each transfer system that is subject to this section and is an individual drain system, the owner or operator shall control air emissions in accordance with the standards specified in 40 CFR part 63, subpart RR -- National Emission Standards for Individual Drain Systems.

(c) For each transfer system that is subject to this section but is not an individual drain system, the owner or operator shall control air emissions by using one of the transfer systems specified in paragraphs (c)(1) through (c)(3) of this section.

(1) A transfer system that uses covers in accordance with the requirements specified in paragraph (d) of this section.

(2) A transfer system that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(3) A transfer system that is enclosed and vented through a closed-vent system to a control device in accordance with the requirements specified in paragraphs (c)(3)(i) and (c)(3)(ii) of this section.

(i) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and

(ii) The closed-vent system and control device are designed and operated in accordance with the requirements of Sec. 63.693 of this subpart.

A. State and Federally Enforcable Section (continued)

8.b 40 CFR, Section 63.689: Transfer systems (continued)

(d) Owners and operators controlling air emissions from a transfer system using covers in accordance with the provisions of paragraph (c)(1) of this section shall meet the requirements specified in paragraphs (d)(1) through (d)(6) of this section.

(1) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the off-site material as it is conveyed by the transfer system except for the openings at the inlet and outlet to the transfer system through which the off-site material passes. The inlet and outlet openings used for passage of the off-site material through the transfer system shall be the minimum size equired for practical operation of the transfer system.

(2) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section joints or between the interface of the cover edge and its mounting.

(3) Except for the inlet and outlet openings to the transfer system through which the off-site material passes, each opening in the cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device.

(4) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the material or its vapors conveyed in the transfer system; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the transfer system on which the cover is installed.

(5) Whenever an off-site material is in the transfer system, the cover shall be installed with each closure device secured in the closed position except as specified in paragraph (d)(5)(i) or (d)(5)(ii) of this section.

(i) Opening of closure devices or removal of the cover is allowed to provide access to the transfer system for performing routine inspection, maintenance, repair, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a hatch or remove the cover to repair conveyance equipment mounted under the cover or to clear a blockage of material inside the system. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable.

(ii) Opening of a safety device, as defined in 63.681 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

(6) The owner or operator shall inspect the air emission control equipment in accordance with the requirements specified in 63.695 of this subpart.

9. 40 CFR, Section 63.690 Standards: Process vents.

(a) The provisions of this section apply to the control of air emissions from process vents for which Sec. 63.683(c)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator must route the vent stream from each affected process vent through a closed-vent system to a control device that meets the standards specified in Sec. 63.693 of this subpart. For the purpose of complying with this paragraph (b), a primary condenser is not a control device; however, a second condenser or other organic recovery device that is operated downstream of the primary condenser is considered a control device.

A. State and Federally Enforcable Section (continued)

10. 40 CFR, Section 63.691 Standards: Equipment leaks

(a) The provisions of this section apply to the control of air emissions from equipment leaks for which Sec. 63.683(d) references the use of this section for such air emissions control.

(b) The owner or operator shall control the HAP emitted from equipment leaks in accordance with the applicable provisions specified in either paragraph (b)(1) or (b)(2) of this section.

(1) The owner or operator controls the HAP emitted from equipment leaks in accordance with Sec. 61.242 through Sec. 61.247 in 40 CFR part 61, subpart V--National Emission Standards for Equipment Leaks; or

(2) The owner or operator controls the HAP emitted from equipment leaks in accordance with Sec. 63.162 through Sec. 63.182 in subpart H--National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks.

40 CFR, Section 63.692 [Reserved]

11.a 40 CFR, Section 63.693 Standards: Closed-vent systems and control devices

(a) The provisions of this section apply to closed-vent systems and control devices used to control air emissions for which another standard references the use of this section for such air emission control.

(b) For each closed-vent system and control device used to comply with this section, the owner or operator shall meet the following requirements:

(1) The owner or operator must use a closed-vent system that meets the requirements specified in paragraph (c) of this section.

(2) The owner or operator must use a control device that meets the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this section.

(3) Whenever gases or vapors containing HAP are vented through a closed-vent system connected to a control device used to comply with this section, the control device must be operating except at those times listed in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.

(i) The control device may be bypassed for the purpose of performing planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that the emission point vented to the control device is shutdown. On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance shall not exceed 240 hours per each calendar year.

(ii) The control device may be bypassed for the purpose of correcting a malfunction of the closed-vent system or control device. The owner or operator shall perform the adjustments or repairs necessary to correct the malfunction as soon as practicable after the malfunction is detected.

A. State and Federally Enforcable Section (continued)

(4) The owner or operator must inspect and monitor each closed-vent system in accordance with the requirements specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.

(i) The owner or operator inspects and monitors the closed-vent system in accordance with the requirements specified in Sec. 63.695(c) of this subpart, and complies with the applicable recordkeeping requirements in Sec. 63.696 of this subpart and the applicable reporting requirements in Sec. 63.697 of this subpart.

(ii) As an alternative to meeting the requirements specified in paragraph (b)(4)(i) of this section, the owner or operator may choose to inspect and monitor the closed-vent system in accordance with the requirements under 40 CFR part 63, subpart H--National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks as specified in 40 CFR 63.172(f) through (h), and complies with the applicable recordkeeping requirements in 40 CFR 63.181 and the applicable reporting requirements in 40 CFR 63.182.

(5) The owner or operator must monitor the operation of each control device in accordance with the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this section.

(6) The owner or operator shall maintain records for each control device in accordance with the requirements of Sec. 63.696 of this subpart.

(7) The owner or operator shall prepare and submit reports for each control device in accordance with the requirements of Sec. 63.697 of this subpart.

(8) In the case when an owner or operator chooses to use a design analysis to demonstrate compliance of a control device with the applicable performance requirements specified in this section as provided for in paragraphs (d) through (g) of this section, the Administrator may request that the design analysis be revised or amended by the owner or operator to correct any deficiencies identified by the Administrator. If the owner or operator and the Administrator do not agree on the acceptability of using the design analysis (including any changes requested by the Administrator) to demonstrate that the control device achieves the applicable performance requirements, then the disagreement must be resolved using the results of a performance test conducted by the owner or operator in accordance with the requirements of Sec. 63.694(l) of this subpart. The Administrator may choose to have an authorized representative observe the performance test conducted by the owner or operator. Should the results of this performance test not agree with the determination of control device performance based on the design analysis, then the results of the performance test will be used to establish compliance with this subpart.

11.b 40 CFR, Section 63.693 Standards: Closed-vent systems and control devices (continued)

(c) Closed-vent system requirements.

(1) The vent stream required to be controlled shall be conveyed to the control device by either of the following closed-vent systems:

(i) A closed-vent system that is designed to operate with no detectable organic emissions using the procedure specified in Sec. 63.694(k) of this subpart; or

(ii) A closed-vent system that is designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gage or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

A. State and Federally Enforcable Section (continued)

(2) In situations when the closed-vent system includes bypass devices that could be used to divert a vent stream from the closed-vent system to the atmosphere at a point upstream of the control device inlet, each bypass device must be equipped with either a flow indicator as specified in paragraph (c)(2)(i) of this section or a seal or locking device as specified in paragraph (c)(2)(ii) of this section. For the purpose of complying with this paragraph (c)(2), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, or pressure relief valves needed for safety reasons are not subject to the requirements of this paragraph (c)(2).

(i) If a flow indicator is used, the indicator must be installed at the entrance to the bypass line used to divert the vent stream from the closed-vent system to the atmosphere. The flow indicator must indicate a reading at least once every 15 minutes. The owner or operator must maintain records of the following information: hourly records of whether the flow indicator was operating and whether flow was detected at any time during the hour; and records of all periods when flow is detected or the flow indicator is not operating.

(ii) If a seal or locking device is used, the bypass line valve must be secured in the non-diverting position with a car-seal or a lock-and-key type configuration. The seal or locking device must be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever) when the bypass device is in the non-diverting position such that the bypass device cannot be moved to the diverting position without breaking the seal or removing the lock. The owner or operator must visually inspect the seal or closure mechanism at least once every month to determine that the bypass line valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

11.c 40 CFR, Section 63.693 Standards: Closed-vent systems and control devices (continued)

(d) Carbon adsorption control device requirements.

(1) The carbon adsorption system must achieve the performance specifications in either paragraph (d)(1)(i) or (d)(1)(ii) of this section.

(i) Recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the carbon adsorption system; or

(ii) Recover 95 percent or more, on a weight-basis, of the total HAP listed in Table 1 of this subpart contained in the vent stream entering the carbon adsorption system.

(2) The owner or operator must demonstrate that the carbon adsorption system achieves the performance requirements in paragraph (d)(1) of this section by either performing a performance test as specified in paragraph (d)(2)(i) of this section or a design analysis as specified in paragraph (d)(2)(ii) of this section.

(i) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of Sec. 63.694(l) of this subpart.

A. State and Federally Enforcable Section (continued)

(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (d)(2)(ii)(A) or (d)(2)(ii)(B) of this section as applicable to the carbon adsorption system design.

(A) For a regenerable carbon adsorption system, the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total regeneration steam flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of the carbon.

(B) For a nonregenerable carbon adsorption system (e.g., a carbon canister), the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, carbon bed capacity, activated carbon type and working capacity, and design carbon replacement interval based on the total carbon working capacity of the control device and emission point operating schedule.

(3) The owner or operator must monitor the operation of the carbon adsorption system in accordance with the requirements of Sec. 63.695(e) using one of the continuous monitoring systems specified in paragraphs (d)(3)(i) through (iii) of this section. Monitoring the operation of a nonregenerable carbon adsorption system (e.g., a carbon canister) using a continuous monitoring system is not required when the carbon canister or the carbon in the control device is replaced on a regular basis according to the requirements in paragraph (d)(4)(iii) of this section.

(i) For a regenerative-type carbon adsorption system:

(A) A continuous parameter monitoring system to measure and record the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle. The integrating regenerating stream flow monitoring device must have an accuracy of ?10 percent; and

(B) A continuous parameter monitoring system to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and to measure the actual carbon bed temperature after regeneration and within 15 minutes of completing the cooling cycle. The accuracy of the temperature monitoring device must be ?1 percent of the temperature being measured, expressed in degrees Celsius or ?5?C, whichever is greater.

(ii) A continuous monitoring system to measure and record the daily average concentration level of organic compounds in the exhaust gas stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.

(iii) A continuous monitoring system that measures other alternative operating parameters upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(4) The owner or operator shall manage the carbon used for the carbon adsorption system, as follows:

A. State and Federally Enforcable Section (continued)

(i) Following the initial startup of the control device, all carbon in the control device shall be replaced with fresh carbon on a regular, predetermined time interval that is no longer than the carbon service life established for the carbon adsorption system. The provisions of this paragraph (d)(4)(i) do not apply to a nonregenerable carbon adsorption system (e.g., a carbon canister) for which the carbon canister or the carbon in the control device is replaced on a regular basis according to the requirements in paragraph (d)(4)(iii) of this section.

(ii) The spent carbon removed from the carbon adsorption system must be either regenerated, reactivated, or burned in one of the units specified in paragraphs (d)(4)(ii)(A) through (d)(4)(ii)(G) of this section.

(A) Regenerated or reactivated in a thermal treatment unit for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart X.

(B) Regenerated or reactivated in a thermal treatment unit equipped with and operating air emission controls in accordance with this section.

(C) Regenerated or reactivated in a thermal treatment unit equipped with and operating organic air emission controls in accordance with a national emission standard for hazardous air pollutants under another subpart in 40 CFR part 63 or 40 CFR part 61.

(D) Burned in a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart O.

(E) Burned in a hazardous waste incinerator for which the owner or operator has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O.

(F) Burned in a boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 266, subpart H.

(G) Burned in a boiler or industrial furnace for which the owner or operator has designed and operates the unit in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) As an alternative to meeting the requirements in paragraphs (d)(3) and (d)(4)(i) of this section, an owner or operator of a nonregenerable carbon adsorption system may choose to replace on a regular basis the carbon canister or the carbon in the control device using the procedures in either paragraph (d)(4)(iii)(A) or (d)(4)(iii)(B) of this section. For the purpose of complying with this paragraph (d)(4)(iii), a nonregenerable carbon adsorption system means a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device, such as a carbon canister. The spent carbon removed from the nonregenerable carbon adsorption system must be managed according to the requirements in paragraph (d)(4)(ii) of this section.

(A) Monitor the concentration level of the organic compounds in the exhaust vent from the carbon adsorption system on a regular schedule, and when carbon breakthrough is indicated, immediately replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon. Measurement of the concentration level of the organic compounds in the exhaust vent stream must be made with a detection instrument that is appropriate for the composition of organic constituents in the vent stream and is routinely calibrated to measure the organic concentration level expected to occur at breakthrough. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of paragraph (d)(2)(ii)(B) of this section, whichever is longer.

A. State and Federally Enforcable Section (continued)

11.d 40 CFR, Section 63.693 Standards: Closed-vent systems and control devices (continued)

(B) Replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of paragraph (d)(2)(ii)(B) of this section.

(e) Condenser control device requirements.

(1) The condenser must achieve the performance specifications in either paragraph (e)(1)(i) or (e)(1)(ii) of this section.

(i) Recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the condenser; or

(ii) Recover 95 percent or more, on a weight-basis, of the total HAP, listed in Table 1 of this subpart, contained in the vent stream entering the condenser.

(2) The owner or operator must demonstrate that the condenser achieves the performance requirements in paragraph (e)(1) of this section by either performing a performance test as specified in paragraph (e)(2)(i) of this section or a design analysis as specified in paragraph (e)(2)(ii) of this section.

(i) An owner or operator choosing to use a performance tests to demonstrate compliance must conduct the test in accordance with the requirements of Sec. 63.694(l) of this subpart.

(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the following information: description of the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature; and specification of the design outlet organic compound 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.

(3) The owner or operator must monitor the operation of the condenser in accordance with the requirements of Sec. 63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (e)(3)(i) through (e)(3)(iii) of this section.

(i) A continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device shall be <plus-minus>1 percent of the temperature being measured, expressed in degrees Celsius or <plus-minus>5 deg.C, whichever is greater.

(ii) A continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The accuracy of the concentration monitoring device shall be <plus-minus>1 percent of the concentration being measured.

(iii) A continuous monitoring system that measures other alternative operating parameters upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(f) This paragraph of the regulation is not applicable to this permittee.

(g) This paragraph of the regulation is not applicable to this permittee.

(h) This paragraph of the regulation is not applicable to this permittee.

A. State and Federally Enforcable Section (continued)

12.a 40 CFR, Section 63.694 Testing methods and procedures

(a) This section specifies the testing methods and procedures required for this subpart to perform the following:

(1) To determine the average VOHAP concentration for off-site material streams at the point-of-delivery for compliance with standards specified Sec. 63.683 of this subpart, the testing methods and procedures are specified in paragraph (b) of this section.

(2) To determine the average VOHAP concentration for treated off-site material streams at the point-of-treatment for compliance with standards specified Sec. 63.684 of this subpart, the testing methods and procedures are specified in paragraph (c) of this section.

(3) To determine the treatment process VOHAP concentration limit (CR) for compliance with standards specified ? 63.684 of this subpart, the testing methods and procedures are specified in paragraph (d) of this section.

(4) To determine treatment process required HAP removal rate (RMR) for compliance with standards specified Sec. 63.684 of this subpart, the testing methods and procedures are specified in paragraph (e) of this section.

(5) To determine treatment process actual HAP removal rate (MR) for compliance with standards specified Sec. 63.684 of this subpart, the testing methods and procedures are specified in paragraph (f) of this section.

(6) To determine treatment process required HAP reduction efficiency (R) for compliance with standards specified in Sec. 63.684 of this
subpart, the testing methods and procedures are specified in paragraph (g) of this section.

(7) To determine treatment process required HAP biodegradation efficiency (Rbio) for compliance with standards specified in ? 63.684 of this subpart, the testing methods and procedures are specified in paragraph (h) of this section.

(8) To determine treatment process required actual HAP mass removal rate (MR<INF>bio</INF>) for compliance with standards specified in Sec. 63.684 of this subpart, the testing methods and procedures are specified in paragraph (i) of this section.

(9) To determine maximum organic HAP vapor pressure of off-site materials in tanks for compliance with the standards specified in Sec. 63.685 of this subpart, the testing methods and procedures are specified in paragraph (j) of this section.

(10) To determine no detectable organic emissions, the testing methods and procedures are specified in paragraph (k) of this section.

(11) To determine closed-vent system and control device performance for compliance with the standards specified in Sec. 63.693 of this subpart, the testing methods and procedures are specified in paragraph (l) of this section.

(12) To determine process vent stream flow rate and total organic HAP concentration for compliance with the standards specified in Sec. 63.693 of this subpart, the testing methods and procedures are specified in paragraph (m) of this section.

A. State and Federally Enforcable Section (continued)

12.b 40 CFR, Section 63.694 Testing methods and procedures (continued)

(b) Testing methods and procedures to determine average VOHAP concentration of an off-site material stream at the point-of-delivery.

(1) The average VOHAP concentration of an off-site material at the point-of-delivery shall be determined using either direct measurement as specified in paragraph (b)(2) of this section or by knowledge as specified in paragraph (b)(3) of this section.

(2) Direct measurement to determine VOHAP concentration

(i) Sampling. Samples of the off-site material stream shall be collected from the container, pipeline, or other device used to deliver the off-site material stream to the plant site in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VOHAP concentration for the off-site material stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the off-site material stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected to represent the complete range of HAP compositions and HAP quantities that occur in the off-site material stream during the entire averaging period due to normal variations in the operating conditions for the source or process generating the off-site material stream. Examples of such normal variations are seasonal variations in off-site material quantity or fluctuations in ambient temperature.

(C) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the off-site material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the plant site operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.

(ii) Analysis. Each collected sample must be prepared and analyzed in accordance with one of the following methods as applicable to the sampled off-site material for the purpose of measuring the HAP listed in Table 1 of this subpart:

(A) Method 305 in 40 CFR part 63, appendix A.

(B) Method 25D in 40 CFR part 60, appendix A.

(C) Method 624 in 40 CFR part 136, appendix A. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 must be followed.

(D) Method 625 in 40 CFR part 136, appendix A. For the purpose of using this method to comply with this subpart, the owner or operator must perform corrections to these compounds based on the "accuracy as recovery" using the factors in Table 7 of the method. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 must be followed.

A. State and Federally Enforcable Section (continued)

(E) Method 1624 in 40 CFR part 136, appendix A.

(F) Method 1625 in 40 CFR part 136, appendix A.

(G) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. As an alternative, an owner or operator may use any more recent, updated version of Method 8260 approved by the EPA. For the purpose of using Method 8260 to comply with this subpart, the owner or operator must maintain a formal quality assurance program consistent with section 8 of Method 8260, and this program must include the following elements related to measuring the concentrations of volatile compounds:

(1) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, and preparation steps.

(2) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.

(3) Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical characteristics to the target analytes.

(H) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. As an alternative, an owner or operator may use any more recent, updated version of Method 8270 approved by the EPA. For the purpose of using Method 8270 to comply with this subpart, the owner or operator must maintain a formal quality assurance program consistent with Method 8270, and this program must include the following elements related to measuring the concentrations of volatile compounds:

(1) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, and preparation steps.

(2) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.

(3) Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical characteristics to the target analytes.

(I) Any other analysis method that has been validated in accordance with the procedures specified in section 5.1 and section 5.3 and the corresponding calculations in section 6.1 or section 6.3 of Method 301 in appendix A in 40 CFR part 63. The data are acceptable if they meet the criteria specified in section 6.1.5 or section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range of 0.7 to 1.30. Other sections of Method 301 are not required.

(iii) Calculations. The average VOHAP concentration (C) on a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (b)(2)(ii) of this section and the following equation. An owner or operator using a test method that provides species-specific chemical concentrations may adjust the measured concentrations to the corresponding concentration values which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate species-specific adjustment factor (fm305) listed in Table 1 of this subpart.

C = (1/QT) x summation of i from 1 to n of (Qi x Ci)

Where:

A. State and Federally Enforcable Section (continued)

C = Average VOHAP concentration of the off-site material at the point-of-delivery on a mass-weighted basis, ppmw.

i = Individual sample "i" of the off-site material.

n = Total number of samples of the off-site material collected (at least 4) for the averaging period (not to exceed 1 year).

Qi = Mass quantity of off-site material stream represented by Ci, kg/hr.

QT = Total mass quantity of off-site material during the averaging period, kg/hr.

Ci = Measured VOHAP concentration of sample "i" as determined in accordance with the requirements of Sec. 63.694(a), ppmw.

(3) Knowledge of the off-site material to determine VOHAP concentration.

(i) Documentation shall be prepared that presents the information used as the basis for the owner's or operator's knowledge of the off-site material stream's average VOHAP concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source or process generating the off-site material stream; species-specific chemical test data for the off-site material stream from previous testing that are still applicable to the current off-site material stream; previous test data for other locations managing the same type of off-site material stream; or other knowledge based on information in documents such as manifests, shipping papers, or waste certification notices.

(ii) If test data are used as the basis for knowledge, then the owner or operator shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VOHAP concentration. For example, an owner or operator may use HAP concentration test data for the off-site material stream that are validated in accordance with Method 301 in 40 CFR part 63, appendix A of this part as the basis for knowledge of the off-site material.

(iii) An owner or operator using species-specific chemical concentration test data as the basis for knowledge of the off-site material may adjust the test data to the corresponding average VOHAP concentration value which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate species-specific adjustment factor (fm305) listed in Table 1 of this subpart.

(iv) In the event that the Administrator and the owner or operator disagree on a determination of the average VOHAP concentration for an off-site material stream using knowledge, then the results from a determination of VOHAP concentration using direct measurement as specified in paragraph (b)(2) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Administrator may perform or request that the owner or operator perform this determination using direct measurement.

12.c 40 CFR, Section 63.694 Testing methods and procedures (continued)

(c) Determination of average VOHAP concentration of an off-site material stream at the point-of-treatment.

(1) Sampling. Samples of the off-site material stream shall be collected at the point-of-treatment in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(i) The averaging period to be used for determining the average VOHAP concentration for the off-site material stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the off-site material stream but shall not exceed 1 year.

(ii) A sufficient number of samples, but no less than four samples, shall be collected to represent the complete range of HAP compositions and HAP quantities that occur in the off-site material stream during the entire averaging period due to normal variations in the operating conditions for the treatment process. Examples of such normal variations are seasonal variations in off-site material quantity or fluctuations in ambient temperature.

A. State and Federally Enforcable Section (continued)

(iii) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the off-site material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the plant site operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.

(2) Analysis. Each collected sample must be prepared and analyzed in accordance with one of the methods specified in paragraphs (b)(2)(ii)(A) through (b)(2)(ii)(I) of this section, as applicable to the sampled off-site material, for the purpose of measuring the HAP listed in Table 1 of this subpart.

(3) Calculations. The average VOHAP concentration (C) a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (c)(2) of this section and the following equation. An owner or operator using a test method that provides species-specific chemical concentrations may adjust the measured concentrations to the corresponding concentration values which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate species-specific adjustment factor (fm305) listed in Table 1 of this subpart.

C = (1/QT) x summation of i from 1 to n of (Qi x Ci)

Where:

C = Average VOHAP concentration of the off-site material on a mass-weighted basis, ppmw.

i = Individual sample "i" of the off-site material.

n = Total number of samples of the off-site material collected (at least 4) for the averaging period (not to exceed 1 year).

Qi = Mass quantity of off-site material stream represented by Ci, kg/hr.

QT = Total mass quantity of off-site material during the averaging period, kg/hr.

Ci = Measured VOHAP concentration of sample "i" as determined in accordance with the requirements of Sec. 63.694(a), ppmw.

A. State and Federally Enforcable Section (continued)

12.d 40 CFR, Section 63.694 Testing methods and procedures (continued)

(d) Determination of treatment process VOHAP concentration limit (CR).

(1) All of the off-site material streams entering the treatment process shall be identified.

(2) The average VOHAP concentration of each off-site material stream at the point-of-delivery shall be determined using the procedures specified in paragraph (b) of this section.

(3) The VOHAP concentration limit (CR) shall be calculated by using the results determined for each individual off-site material stream and the following equation:

CR = (summation of x from 1 to m of (Qx x Cx) + summation of y from 1 to n of (Qy x 500 ppmw)) all divided by (summation of x from 1 to m of (Qx) + summation of y from 1 to n of (Qy))

where:

CR=VOHAP concentration limit, ppmw.

x=Individual off-site material stream "x" that has a VOHAP concentration less than 500 ppmw at the point-of-delivery.

y=Individual off-site material stream "y" that has a VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery.

m=Total number of "x" off-site material streams treated by process.

n=Total number of "y" off-site material streams treated by process.

Qx=Total mass quantity of off-site material stream "x", kg/yr.

Qy=Total mass quantity of off-site material stream "y", kg/yr.

Cx=VOHAP concentration of off-site material stream "x" at the point-of-delivery, ppmw.

A. State and Federally Enforcable Section (continued)

12.e 40 CFR, Section 63.694 Testing methods and procedures (continued)

(e) Determination of required HAP mass removal rate (RMR).

(1) Each individual stream containing HAP that enters the treatment process shall be identified.

(2) The average VOHAP concentration at the point-of-delivery for each stream identified in paragraph (e)(1) of this section shall be determined using the test methods and procedures specified in paragraph (b) of this section.

(3) For each stream identified in paragraph (e)(1) of this section that has an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery, the average volumetric flow rate and the density of the off-site material stream at the point-of-delivery shall be determined.

(4) The required HAP mass removal rate (RMR) shall be calculated by using the average VOHAP concentration, average volumetric flow rate, and density determined in paragraph (e)(3) of this section for each stream and the following equation:

RMR = summation of y from 1 to n of (Vy x ky x ((Cy - 500 ppmw) / 10 E 6))

Where:

RMR = Required HAP mass removal rate, kg/hr.

y = Individual stream "y" that has a VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery as determined in Sec. 63.694(b).

n = Total number of "y" streams treated by process.

Vy = Average volumetric flow rate of stream "y" at the point-of-delivery, m3/hr.

ky = Density of stream "y", kg/m3.

Cy = Average VOHAP concentration of stream "y" at the point-of-delivery as determined in ? 63.694(b)(2), ppmw.

12.f 40 CFR, Section 63.694 Testing methods and procedures (continued)

(f) Determination of actual HAP mass removal rate (MR).

(1) The actual HAP mass removal rate (MR) shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.

(2) The HAP mass flow entering the process (Eb) and the HAP mass flow exiting the process (Ea) shall be determined using the test methods and procedures specified in paragraphs (g)(2) through (g)(4) of this section.

(3) The actual mass removal rate shall be calculated using the HAP mass flow rates determined in paragraph (f)(2) of this section and the following equation:

MR = Eb - Ea

where:

MR = Actual HAP mass removal rate, kg/hr.
Eb = HAP mass flow entering process as determined in paragraph (f)(2) of this section, kg/hr.
Ea = HAP mass flow exiting process as determined in paragraph (f)(2) of this section, kg/hr.

A. State and Federally Enforcable Section (continued)

12.g 40 CFR, Section 63.694 Testing methods and procedures (continued)

(g) Determination of treatment process HAP reduction efficiency (R).

(1) The HAP reduction efficiency (R) for a treatment process shall be determined based on results for a minimum of three consecutive runs.

(2) Each individual stream containing HAP that enters the treatment process shall be identified. Each individual stream containing HAP that exits the treatment process shall be identified. The owner or operator shall prepare a sampling plan for measuring the identified streams that accurately reflects the retention time of the material in the process.

(3) For each run, information shall be determined for each stream identified in paragraph (g)(2) of this section as specified in paragraphs (g)(3)(i) through (g)(3)(iii) of this section.

(i) The mass quantity shall be determined for each stream identified in paragraph (g)(2) of this section as entering the process (Qb). The mass quantity shall be determined for each stream identified in paragraph (g)(2) of this section as exiting the process (Qa).

(ii) The average VOHAP concentration at the point-of-delivery shall be determined for each stream entering the process (Cb) (as identified in paragraph (g)(2) of this section) using the test methods and procedures specified in paragraph (b) of this section.

(iii) The average VOHAP concentration at the point-of-treatment shall be determined for each stream exiting the process (Ca) (as identified in paragraph (g)(2) of this section) using the test methods and procedures specified in paragraph (c) of this section.

(4) The HAP mass flow entering the process (Eb) and the HAP mass flow exiting the process (Ea) shall be calculated using the results determined in paragraph (g)(3) of this section and the following equations:

Ea = 1/(10 E 6) x (summation of j from 1 to m of (Qaj x Caj)) and

Eb = 1/(10 E 6) x (summation of j from 1 to m of (Qbj x Cbj))

Where:

A. State and Federally Enforcable Section (continued)

Eb = HAP mass flow entering process, kg/hr.

Ea = HAP mass flow exiting process, kg/hr.

m = Total number of runs (at least 3)

j = Individual run "j"

Qbj = Mass quantity of material entering process during run "j", kg/hr.

Qaj = Average mass quantity of material exiting process during run "j", kg/hr.

Caj = Average VOHAP concentration of material exiting process during run "j" as determined in Sec. 63.694(c), ppmw.

Cbj = Average VOHAP concentration of material entering process during run "j" as determined in Sec. 63.694(b)(2), ppmw.

(5) The HAP reduction efficiency (R) shall be calculated using the HAP mass flow rates determined in paragraph (g)(4) of this section and the following equation:

R = ((Eb - Ea) / Eb) x 100

Where:

R = HAP reduction efficiency, percent.

Eb = HAP mass flow entering process as determined in paragraph (g)(4) of this section, kg/hr.

Ea = HAP mass flow exiting process as determined in accordance with the requirements of paragraph (g)(4) of this section, kg/hr.

12.h 40 CFR, Section 63.694 Testing methods and procedures (continued)

(h) Determination of HAP biodegradation efficiency (Rbio).

(1) The fraction of HAP biodegraded (Fbio) shall be determined using one of the procedures specified in appendix C of this part 63.

(2) The HAP biodegradation efficiency (Rbio) shall be calculated by using the following equation:

Rbio = Fbio ? 100

where:

Rbio = HAP biodegradation efficiency, percent.

Fbio = Fraction of HAP biodegraded as determined in paragraph (h)(1) of this section.

A. State and Federally Enforcable Section (continued)

12.i 40 CFR, Section 63.694 Testing methods and procedures (continued)

(i) Determination of actual HAP mass removal rate (MRbio).

(1) The actual HAP mass removal rate (MRbio) shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.

(2) The HAP mass flow entering the process (Eb) shall be determined using the test methods and procedures specified in paragraphs (g)(2) through (g)(4) of this section.

(3) The fraction of HAP biodegraded (Fbio) shall be determined using the procedure specified in 40 CFR part 63, appendix C of this part.

(4) The actual mass removal rate shall be calculated by using the HAP mass flow rates and fraction of HAP biodegraded determined in paragraphs (i)(2) and (i)(3), respectively, of this section and the following equation:

MRbio = Eb ? Fbio

Where:

MRbio = Actual HAP mass removal rate, kg/hr.

Eb = HAP mass flow entering process, kg/hr.

Fbio = Fraction of HAP biodegraded.

12.j 40 CFR, Section 63.694 Testing methods and procedures (continued)

(j) Determination of maximum HAP vapor pressure for off-site material in a tank.

(1) The maximum HAP vapor pressure of the off-site material composition managed in a tank shall be determined using either direct measurement as specified in paragraph (j)(2) of this section or by knowledge of the off-site material as specified by paragraph (j)(3) of this section.

(2) Direct measurement to determine the maximum HAP vapor pressure of an off-site material.

(i) Sampling. A sufficient number of samples shall be collected to be representative of the off-site material contained in the tank. All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the off-site material is collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the plant site operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in ``Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,'' EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.

(ii) Analysis. Any one of the following methods may be used to analyze the samples and compute the maximum HAP vapor pressure of the off-site material:

(A) Method 25E in 40 CFR part 60 appendix A;

(B) Methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from External Floating Roof Tanks,";

(C) Methods obtained from standard reference texts;

(D) ASTM Method 2879-83; or

(E) Any other method approved by the Administrator.

A. State and Federally Enforcable Section (continued)

(3) Use of knowledge to determine the maximum HAP vapor pressure of the off-site material. Documentation shall be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum HAP vapor pressure of the off-site material is less than the maximum vapor pressure limit listed in Table 3 or Table 4 of this subpart for the applicable tank design capacity category. Examples of information that may be used include: the off-site material is generated by a process for which at other locations it previously has been determined by direct measurement that the off-site material maximum HAP vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

12.k 40 CFR, Section 63.694 Testing methods and procedures (continued)

(k) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

(3) 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 organic constituents in the material placed in the unit, not for each individual organic constituent.

(4) The detection 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.

(5) Calibration gases shall be as follows:

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

(ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv.

(6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (k)(8)(i) or (k)(8)(ii) of this section.

(i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

A. State and Federally Enforcable Section (continued)

(ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (k)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (k)(9)(i) and (k)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 10,000 ppmv.

12.l 40 CFR, Section 63.694 Testing methods and procedures (continued)

(l) Control device performance test procedures.

(1) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites at the inlet and outlet of the control device.

(i) To determine compliance with a control device percent reduction requirement, sampling sites shall be located at the inlet of the control device as specified in paragraphs (l)(1)(i)(A) and (l)(1)(i)(B) of this section, and at the outlet of the control device.

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

(B) If a vent stream is introduced with the combustion air or as an auxiliary fuel into a boiler or process heater, the location of the inlet sampling sites shall be selected to ensure that the measurement of total HAP concentration or TOC concentration, as applicable, includes all vent streams and primary and secondary fuels introduced into the boiler or process heater.

(ii) To determine compliance with an enclosed combustion device concentration limit, the sampling site shall be located at the outlet of the device.

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

(3) To determine compliance with the control device percent reduction requirement, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A of this chapter; alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 in 40 CFR part 63, appendix A of this part may be used. The following procedures shall be used to calculate percent reduction efficiency:

A. State and Federally Enforcable Section (continued)

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

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

(A) The following equations shall be used:

Ei = K2 x Qi x summation of j from 1 to n of (Cij x Mij) and
Eo = K2 x Qo x summation of j from 1 to n of (Coj x Moj)

where:

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

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

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

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

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

(B) When the TOC mass rate is calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR part 60, appendix A shall be summed using the equation in paragraph (l)(3)(ii)(A) of this section.

(C) When the total HAP mass rate is calculated, only the HAP constituents shall be summed using the equation in paragraph (l)(3)(ii)(A) of this section.

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

Rcd = ((Ei - Eo)/Ei) x 100

A. State and Federally Enforcable Section (continued)

where:

Rcd=Control efficiency of control device, percent.

Ei=Mass rate of TOC (minus methane and ethane) or total HAP at the inlet to the control device as calculated under paragraph (l)(3)(ii) of this section, kilograms TOC per hour or kilograms HAP per hour.

Eo=Mass rate of TOC (minus methane and ethane) or total HAP at the outlet of the control device, as calculated under paragraph (l)(3)(ii) of this section, kilograms TOC per hour or kilograms HAP per hour.

(iv) If the vent stream entering a boiler or process heater is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total HAP in all combusted vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total HAP exiting the device, respectively.

(4) To determine compliance with the enclosed combustion device total HAP concentration limit of this subpart, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A to measure either TOC (minus methane and ethane) or total HAP. Alternatively, any other method or data that has been validated according to Method 301 in appendix A of this part, may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

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

(ii) The TOC concentration or total HAP concentration shall be calculated according to paragraph (m)(4)(ii)(A) or (m)(4)(ii)(B) of this section.

A. State and Federally Enforcable Section (continued)

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

Ctoc = summation of i from 1 to x of ((summation of j from 1 to n of (Cij)) / x)

where:

CTOC=Concentration of total organic compounds minus methane and ethane, dry basis, parts per million by volume.

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

n=Number of components in the sample.

x=Number of samples in the sample run.

(B) The total HAP concentration (CHAP) shall be computed according to the equation in paragraph (l)(4)(ii)(A) of this section except that only HAP constituents shall be summed.

(iii) The measured TOC concentration or total HAP concentration shall be corrected to 3 percent oxygen as follows:

(A) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the oxygen concentration (%O2dry). The samples shall be collected during the same time that the samples are collected for determining TOC concentration or total HAP concentration.

(B) The concentration corrected to 3 percent oxygen (Cc) shall be computed using the following equation:

Cc = Cm x (17.9 / (20.9 - %O2dry))

where:

Cc=TOC concentration or total HAP concentration corrected to 3 percent oxygen, dry basis, parts per million by volume.

Cm=Measured TOC concentration or total HAP concentration, dry basis, parts per million by volume.

%O2dry=Concentration of oxygen, dry basis, percent by volume.

A. State and Federally Enforcable Section (continued)

12.m 40 CFR, Section 63.694 Testing methods and procedures (continued)

(m) Determination of process vent stream flow rate and total HAP concentration.

(1) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, must 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.

(3) Process vent stream gas volumetric flow rate must be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

(4) Process vent stream total HAP concentration must be measured using the following procedures:

(i) Method 18 of 40 CFR part 60, appendix A, must be used to measure the total HAP 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.

(ii) Where Method 18 of 40 CFR part 60, appendix A, is used, the following procedures must be used to calculate parts per million by volume concentration:

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

(B) The total HAP concentration (CHAP) must be computed according to the following equation:

CHAP = (summation of i from 1 to x of (summation of j from 1 to n of Cji)) / X

Where:

CHAP = Total concentration of HAP compounds listed in Table 1 of this subpart, dry basis, parts per million by volume.

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

n = Number of components in the sample.

X = Number of samples in the sample run.

13.a 40 CFR, Section 63.695 Inspection and Monitoring Requirements

(a) This section specifies the inspection and monitoring procedures required to perform the following:

(1) To inspect tank fixed roofs and floating roofs for compliance with the Tank Level 2 controls standards specified in Sec. 63.685 of this subpart, the inspection procedures are specified in paragraph (b) of this section

(2) To inspect and monitor closed-vent systems for compliance with the standards specified in Sec. 63.693 of this subpart, the inspection and monitoring procedures are specified in paragraph (c) of this section.

(3) To inspect and monitor transfer system covers for compliance with the standards specified in Sec. 63.689(c)(1) of this subpart, the inspection and monitoring procedures are specified in paragraph (d) of this section.

(4) To monitor control devices for compliance with the standards specified in Sec. 63.693 of this subpart, the monitoring procedures are specified in paragraph (e) of this section.

A. State and Federally Enforcable Section (continued)

13.b 40 CFR, Section 63.695 Inspection and Monitoring Requirements (continued)

(b) Tank Level 2 fixed roof and floating roof inspection requirements.

(1) Owners and operators that use a tank equipped with an internal floating roof in accordance with the provisions of Sec. 63.685(e) of this subpart shall meet the following inspection requirements:

(i) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, the internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the waste surfaces from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) The owner or operator shall inspect the internal floating roof components as follows except as provided for in paragraph (b)(1)(iii) of this section:

(A) Visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every calendar year after initial fill, and

(B) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in Sec.697 of this subpart

(iii) As an alternative to performing the inspections specified in paragraph (b)(1)(ii) of this section for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 5 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in Sec. 63.697 of this subpart.

(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 63.696 of this subpart.

(2) Owners and operators that use a tank equipped with an external floating roof in accordance with the provisions of Sec. 63.685(f) of this subpart shall meet the following requirements:

(i) The owner or operator shall measure the external floating roof seal gaps in accordance with the following requirements:

A. State and Federally Enforcable Section (continued)

(A) The owner or operator shall perform measurements of gaps between the tank wall and the primary seal within 60 days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in Sec. 63.697 of this subpart.

(B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 days after initial operation of the separator following installation of the floating roof and, thereafter, at least once every year. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in Sec. 63.697 of this subpart.

(C) If a tank ceases to hold off-site material for a period of 1 year or more, subsequent introduction of off-site material into the tank shall be considered an initial operation for the purposes of paragraphs (b)(2)(i)(A) and (b)(2)(i)(B) of this section.

(D) The owner shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure.

(1) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.

(2) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter (cm) (\1/8\-inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.

(3) For a seal gap measured under paragraph (b)(2) of this section, the gap surface area 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.

(4) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in Sec. 63.685(f)(1) of this subpart.

(E) In the event that the seal gap measurements do not conform to the specifications in Sec. 63.685(f)(1) of this subpart, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 63.696 of this subpart.

(ii) The owner or operator shall visually inspect the external floating roof in accordance with the following requirements:

(A) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to: holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(B) The owner or operator shall perform the inspections following installation of the external floating roof and, thereafter, at least once every year.

A. State and Federally Enforcable Section (continued)

(C) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 63.696(d) of this subpart.

(3) Owners and operators that use a tank equipped with a fixed roof in accordance with the provisions of Sec. 63.685(g) of this subpart shall meet the following requirements:

(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the separator wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a tank is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., fill ports, access hatches, gauge wells, etc.) and can be opened to the atmosphere.

(ii) The owner or operator must perform an initial inspection following installation of the fixed roof. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 63.696(e) of this subpart.

(4) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (b)(1), (b)(2), or (b)(3) of this section in the following manner:

(i) The owner or operator shall within 45 calendar days of detecting the defect either repair the defect or empty the tank and remove it from service. If within this 45-day period the defect cannot be repaired or the tank cannot be removed from service without disrupting operations at the plant site, the owner or operator is allowed two 30-day extensions. In cases when an owner or operator elects to use a 30-day extension, the owner or operator shall prepare and maintain documentation describing the defect, explaining why alternative storage capacity is not available, and specify a schedule of actions that will ensure that the control equipment will be repaired or the tank emptied as soon as possible.

(ii) When a defect is detected during an inspection of a tank that has been emptied and degassed, the owner or operator shall repair the defect before refilling the tank.

A. State and Federally Enforcable Section (continued)

13.c 40 CFR, Section 63.695 Inspection and Monitoring Requirements (continued)

(c) Owners and operators that use a closed-vent system in accordance with the provisions of Sec. 63.693 of this subpart shall meet the following inspection and monitoring requirements:

(1) Each closed-vent system that is used to comply with Sec. 63.693(c)(1)(i) of this subpart shall be inspected and monitored in accordance with the following requirements:

(i) At initial startup, the owner or operator shall monitor the closed-vent system components and connections using the procedures specified in Sec. 63.694(k) of this subpart to demonstrate that the closed-vent system operates with no detectable organic emissions.

(ii) After initial startup, the owner or operator shall inspect and monitor the closed-vent system as follows:

(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The owner or operator shall monitor a component or connection using the procedures specified in Sec. 63.694(k) of this subpart to demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

(B) Closed-vent system components or connections other than those specified in paragraph (c)(1)(ii)(A) of this section, shall be monitored at least once per year using the procedures specified in Sec. 63.694(k) of this subpart to demonstrate that components or connections operate with no detectable organic emissions.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect or leak in accordance with the requirements of paragraph (c)(3) of this section.

(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Sec. 63.696 of this subpart.

(2) Each closed-vent system that is used to comply with Sec. 63.693(c)(1)(ii) of this subpart shall be inspected and monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping; loose connections; or broken or missing caps or other closure devices.

(ii) The owner or operator must perform an initial inspection following installation of the closed-vent system. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (c)(3) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 63.696 of this subpart.

(3) The owner or operator shall repair all detected defects as follows:

(i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection.

A. State and Federally Enforcable Section (continued)

(ii) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (c)(3)(ii)(A) or (c)(3)(ii)(B) occurs. In this case, the owner or operator must repair the defect the next time the process or unit that vents to the closed-vent system is shutdown. Repair of the defect must be completed before the process or unit resumes operation.

(A) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.

(B) The owner or operator determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.

(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in Sec. 63.696 of this subpart.

13.d 40 CFR, Section 63.695 Inspection and Monitoring Requirements (continued)

(d) Owners and operators that use a transfer system equipped with a cover in accordance with the provisions of Sec. 63.689(c)(1) of this subpart shall meet the following inspection requirements:

(1) The cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover sections or between the cover and its mounting; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a transfer system is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., access hatches, etc.) and can be opened to the atmosphere.

(2) The owner or operator must perform an initial inspection following installation of the cover. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(3) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(5) of this section.

(4) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 63.696 of this subpart.

(5) The owner or operator shall repair all detected defects as follows:

(i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (d)(5)(ii) of this section.

(ii) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system is available at the site to accept the material normally handled by the system. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repair of the defect must be completed before the process or unit resumes operation.

(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in Sec. 63.696 of this subpart.

A. State and Federally Enforcable Section (continued)

13.e 40 CFR, Section 63.695 Inspection and Monitoring Requirements (continued)

(e) Control device monitoring requirements. For each control device required under Sec. 63.693 of this subpart to be monitored in accordance with the provisions of this paragraph (e), the owner or operator must ensure that each control device operates properly by monitoring the control device in accordance with the requirements specified in paragraphs (e)(1) through (e)(7) of this section.

(1) A continuous parameter monitoring system must be used to measure the operating parameter or parameters specified for the control device in Sec. 63.693(d) through Sec. 63.693(g) of this subpart as applicable to the type and design of the control device. The continuous parameter monitoring system must meet the following specifications and requirements:

(i) The continuous parameter monitoring system must measure either an instantaneous value at least once every 15 minutes or an average value for intervals of 15 minutes or less and continuously record either:

(A) Each measured data value; or

(B) Each block average value for each 1-hour period 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.

(ii) The monitoring system must be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly.

(2) Using the data recorded by the monitoring system, the owner or operator must calculate the daily average value for each monitored operating parameter for each operating day. If operation of the control device is continuous, the operating day is a 24-hour period. If control device operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average.

(3) For each monitored operating parameter, the owner or operator must establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the control device must be operated to continuously achieve the applicable performance requirements specified in Sec. 63.693(b)(2) of this subpart. Each minimum or maximum operating parameter value must be established in accordance with the requirements in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.

(i) If the owner or operator conducts a performance test to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on values measured during the performance test and supplemented, as necessary, by the control device design specifications, manufacturer recommendations, or other applicable information.

(ii) If the owner or operator uses a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.

A. State and Federally Enforcable Section (continued)

(4) An excursion for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (e)(4)(i) through (e)(4)(iii) of this section being met. When multiple operating parameters are monitored for the same control device and during the same operating day more than one of these operating parameters meets an excursion criterion specified in paragraphs (e)(4)(i) through (e)(4)(iii) of this section, then a single excursion is determined to have occurred for the control device for that operating day.

(i) An excursion occurs when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter in accordance with the requirements of paragraph (e)(3) of this section

(ii) An excursion occurs when the period of control device operation is 4 hours or greater in an operating day and the monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.

(iii) An excursion occurs when the period of control device operation is less than 4 hours in an operating day and more than 1 of the hours during the period does not constitute a valid hour of data due to insufficient monitoring data. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.

(5) For each excursion, except as provided for in paragraph(e)(6) of this section, the owner or operator shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard.

(6) An excursion is not a violation of this standard under any one of the conditions specified in paragraphs (e)(6)(i) and (e)(6)(ii) of this section.

(i) An excursion is not a violation nor does it count toward the number of excused excursions allowed under paragraph (e)(6)(ii) of this section when the excursion occurs during any one of the following periods:

(A) During a period of startup, shutdown, or malfunction when the affected facility is operated during such period in accordance with the facility's startup, shutdown, and malfunction plan; or

(B) During periods of non-operation of the unit or the process that is vented to the control device (resulting in cessation of HAP emissions to which the monitoring applies).

(ii) For each control device, one excused excursion is allowed per semiannual period for any reason. The initial semiannual period is the 6-month reporting period addressed by the first semiannual report submitted by the owner or operator in accordance with Sec. 63.697(b)(4) of this subpart.

(7) Nothing in paragraphs (e)(1) through (e)(6) of this section shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of this subpart.

A. State and Federally Enforcable Section (continued)

13.f 40 CFR, Section 63.695 Inspection and Monitoring Requirements (continued)

(f) Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a piece of air pollution control equipment in accordance with the applicable provisions of this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (f)(1) and (f)(2) of this section.

(1) The owner or operator must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as ``unsafe to inspect and monitor.'' The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.

(2) The owner or operator must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

14.a 40 CFR, Section 63.696 Record keeping requirements

(a) The owner or operator subject to this subpart shall comply with the record keeping requirements in Sec.63.10 under 40 CFR 63 subpart A--General Provisions that are applicable to this subject as specified in Table 2 of this subpart.

(b) The owner or operator of a control device subject to this subpart shall maintain the records in accordance with the requirements of 40 CFR 63.10 of this part.

(c) [Reserved]

(d) Each owner or operator using an internal floating roof to comply with the tank control requirements specified in Sec. 63.685(e) of this subpart or using an external floating roof to comply with the tank control requirements specified in Sec. 63.685(f) of this subpart shall prepare and maintain the following records:

(1) Documentation describing the floating roof design and the dimensions of the tank.

(2) A record for each inspection required by Sec. 63.695(b) of this subpart, as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of inspection.

(3) The owner or operator shall record for each defect detected during inspections required by Sec. 63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Sec. 63.695(b)(4) of this section, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(4) Owners and operators that use a tank equipped with an external floating roof in accordance with the provisions of Sec. 63.685(f) of this subpart shall prepare and maintain records for each seal gap inspection required by Sec. 63.695(b) describing the results of the seal gap measurements. The records shall include the date of that the measurements are performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Sec. 63.695(b) of this subpart, the records shall include a description of the repairs that were made, the date the repairs were made, and the date the separator was emptied, if necessary.

A. State and Federally Enforcable Section (continued)

14.b 40 CFR, Section 63.696 Record keeping requirements (continued)

(e) Each owner or operator using a fixed roof to comply with the tank control requirements specified in Sec. 63.685(g) of this subpart shall prepare and maintain the following records:

(1) A record for each inspection required by Sec. 63.695(b) of this subpart, as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of inspection.

(2) The owner or operator shall record for each defect detected during inspections required by Sec. 63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Sec. 63.695(b)(4) of this section, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

14.c 40 CFR, Section 63.696 Record keeping requirements (continued)

(f) Each owner or operator using an enclosure to comply with the tank control requirements specified in Sec. 63.685(i) of this subpart shall prepare and maintain records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure asspecified in "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, Appendix B.

14.d 40 CFR, Section 63.696 Record keeping requirements (continued)

(g) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (g)(1) and (g)(2) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of Sec. 63.693(d) through (h) of this subpart, as applicable.

(1) 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.

(2) 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 these 6 months that the control device did not meet the requirement of Sec. 63.693 (d) through (h) of this subpart, as applicable, due to planned routine maintenance.

14.e 40 CFR, Section 63.696 Record keeping requirements (continued)

(h) An owner or operator shall record the information specified in paragraphs (h)(1) through (h)(3) of this section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Sec. 63.693 (d) through (h) of this subpart, as applicable.

(1) The occurrence and duration of each malfunction of the control device system.

(2) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.

(3) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

A. State and Federally Enforcable Section (continued)

15.a 40 CFR, Section 63.697 Reporting Requirements

(a) Each owner or operator of an affected source subject to this subpart must comply with the notification requirements specified in paragraph (a)(1) of this section and the reporting requirements specified in paragraph (a)(2) of this section.

(1) The owner or operator of an affected source must submit notices to the Administrator in accordance with the applicable notification requirements in 40 CFR 63.9 as specified in Table 2 of this subpart. For the purpose of this subpart, an owner or operator subject to the initial notification requirements under 40 CFR 63.9(b)(2) must submit the required notification on or before October 19, 1999.

(2) The owner or operator of an affected source must submit reports to the Administrator in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of this subpart.

15.b 40 CFR, Section 63.697 Reporting Requirements (continued)

(b) The owner or operator of a control device used to meet the requirements of Sec. 63.693 of this subpart shall submit the following notifications and reports to the Administrator:

(1) A Notification of Performance Tests specified in Sec. 63.7 and Sec. 63.9(g) of this part,

(2) Performance test reports specified in Sec. 63.10(d)(2) of this part, and

(3) Startup, shutdown, and malfunction reports specified in Sec. 63.10(d)(5) of this part.

(i) 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 not completely consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in Sec. 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The startup, shutdown, or malfunction report shall consist of a letter, containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator, and

(ii) Separate startup, shutdown, or malfunction reports are not required if the information is included in the summary report specified in paragraph (b)(4) of this section.

(4) A summary report specified in Sec. 63.10(e)(3) of this part shall be submitted on a semiannual basis (i.e., once every 6-month period). The summary report must include a description of all excursions as defined in Sec. 63.695(e) of this subpart that have occurred during the 6-month reporting period. For each excursion caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the exceedance occurred. For each excursion caused by lack of monitoring data, the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.

A. State and Federally Enforcable Section (continued)

15.c 40 CFR, Section 63.697 Reporting Requirements (continued)

(c) Each owner or operator using an internal floating roof or external floating roof to comply with the Tank Level 2 control requirements specified in Sec. 63.685(d) of this subpart shall notify the Administrator in advance of each inspection required under Sec. 63.695(b) of this subpart to provide the Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Administrator of the date and location of the inspection as follows:

(1) Prior to each inspection to measure external floating roof seal gaps as required under Sec. 63.695(b) of this subpart, written notification shall be prepared and sent by the owner or operator so that it is received by the Administrator at least 30 calendar days before the date the measurements are scheduled to be performed.

(2) Prior to each visual inspection of an internal floating roof or external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (c)(3) of this section.

(3) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Administrator at least 7 calendar days before refilling the tank.

16. 40 CFR, Part 68 - Accident Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)(7). Pollutants covered are those regulated substances that have more than the threshold quantities in a process ad defined in 40 CFR 68.130 and as determined under 40 CFR 68.115.

17. 40 CFR, Part 61, Subpart FF

40 CFR, Section 61.340 Applicability

(a) The provisions of this subpart apply to owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries.

(b) The provisions of this subpart apply to owners and operators of hazardous waste treatment, storage, and disposal facilities that treat, store or dispose of hazardous waste generated by any facility listed in paragraph (a) of this section. The waste streams at hazardous waste treatment, storage, and disposal facilitiessubject to the provisions of this subpart are the benzene-containing hazardous waste from any facility listed in paragraph (a) of this section. A hazardous waste treatment, storage and disposal facility is a facility that must obtain a hazardous waste management permit under subtitle C of the Solid Waste Disposal Act.

(c) At each facility identified in paragraph (a) or (b) of this section, the following waste is exempt from the requirements of this subpart:

(1) Waste in the form of gases or vapors that is emitted from process fluids:

(2) Waste that is contained in a segregated stormwater sewer system.

(d) At each facility identified in paragraph (a) or (b) of this section, any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in Sec.61.341, is exempt from this subpart. No testing, monitoring, recordkeeping, or reporting is required under this subpart for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

A. State and Federally Enforcable Section (continued)

18.a 40 CFR, Section 61.342 Standards: General

(a) An owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of paragraphs (b) and (c) of this section. 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:

(1) Wastes that are exempted from control under Secs. 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.

(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.

(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 (c) through (h) of this section. 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.

(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 Sec. 61.355(c)(1)(i) (A) through (C).

18.b 40 CFR, Section 61.342 Standards: General (continued)

(b) Each owner or operator 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 this section shall be in compliance with the requirements of paragraphs (c) through (h) of this section no later than 90 days following the effective date, unless a waiver of compliance has been obtained under Sec. 61.11, or by the initial startup for a new source with an initial startup after the effective date.

(1) The owner or operator of an existing source unable to comply with the rule within the required time may request a waiver of compliance under Sec. 61.10.

(2) As part of the waiver application, the owner or operator shall submit to the Administrator a plan under Sec. 61.10(b)(3) that is an enforceable commitment to obtain environmental benefits to mitigate the benzene emissions that result from extending the compliance date. The plan shall include the following information:

(i) A description of the method of compliance, including the control approach, schedule for installing controls, and quantity of the benzene emissions that result from extending the compliance date;

(ii) If the control approach involves a compliance strategy designed to obtain integrated compliance with multiple regulatory requirements, a description of the other regulations involved and their effective dates; and

(iii) A description of the actions to be taken at the facility to obtain mitigating environmental benefits, including how the benefits will be obtained, the schedule for these actions, and an estimate of the quantifiable benefits that directly result from these actions.

A. State and Federally Enforcable Section (continued)

18.c 40 CFR, Section 61.342 Standards: General (continued)

(c) Each owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr as determined in paragraph (a) of this section shall manage and treat the facility waste as follows:

(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 owner or operator shall:

(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 Sec. 61.348 of this subpart.

(ii) Comply with the standards specified in Secs. 61.343 through 61.347 of this subpart for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with paragraph (c)(1)(i) of this section.

(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 Secs. 61.343 through 61.347. Once the waste stream is recycled to a process, including to a tank used for the storage of production process feed, product, or product intermediates, unless this tank is used primarily for the storage of wastes, the material is no longer subject to paragraph (c) of this section.

(2) A waste stream is exempt from paragraph (c)(1) of this section provided that the owner or operator 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 Sec. 61.355(c)(2) or Sec. 61.355(c)(3).

(3) A waste stream is exempt from paragraph (c)(1) of this section provided that the owner or operator demonstrates initially and, thereafter, at least once per year that the conditions specified in either paragraph (c)(3)(i) or (c)(3)(ii) of this section are met.

(i) The waste stream is process wastewater that has a flow rate less than 0.02 liters per minute or an annual wastewater quantity of less than 10 Mg/yr; or

(ii) All of the following conditions are met:

(A) The owner or operator does not choose to exempt process wastewater under paragraph (c)(3)(i) of this section,

(B) The total annual benzene quantity in all waste streams chosen for exemption in paragraph (c)(3)(ii) of this section does not exceed 2.0 Mg/yr as determined in the procedures in Sec. 61.355(j), and

(C) The total annual benzene quantity in a waste stream chosen for exemption, including process unit turnaround waste, is determined for the year in which the waste is generated.

A. State and Federally Enforcable Section (continued)

18.d 40 CFR, Section 61.342 Standards: General (continued)

(d) As an alternative to the requirements specified in paragraphs (c) and (e) of this section, an owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr as determined in paragraph (a) of this section may elect to manage and treat the facility waste as follows

(1) The owner or operator shall manage and treat facility waste other than process wastewater in accordance with the requirements of paragraph (c)(1) of this section.

(2) The owner or operator shall manage and treat process wastewater in accordance with the following requirements:

(i) Process wastewater shall be treated to achieve a total annual benzene quantity from facility process wastewater less than 1Mg/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 this section.

(ii) Each treated process wastewater stream identified in paragraph (d)(2)(i) of this section shall be managed and treated in accordance with paragraph (c)(1) of this section.

(iii) Each untreated process wastewater stream identified in paragraph (d)(2)(i) of this section is exempt from the requirements of paragraph (c)(1) of this section.

18.e 40 CFR, Section 61.342 Standards: General (continued)

(e) As an alternative to the requirements specified in paragraphs (c) and (d) of this section, an owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr as determined in paragraph (a) of this section may elect to manage and treat the facility waste as follows

(1) The owner or operator 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 this section; and

(2) The owner or operator 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) The benzene quantity for the wastes described in paragraph (e)(2) of this section must be equal to or less than 6.0 Mg/yr, as determined in Sec. 61.355(k). Wastes as described in paragraph (e)(2) of this section that are transferred offsite shall be included in the determination of benzene quantity as provided in Sec. 61.355(k). The provisions of paragraph (f) of this section shall not apply to any owner or operator who elects to comply with the provisions of paragraph (e) of this section.

(ii) The determination of benzene quantity for each waste stream defined in paragraph (e)(2) of this section shall be made in accordance with Sec. 61.355(k).

18.f 40 CFR, Section 61.342 Standards: General (continued)

(f) Rather than treating the waste onsite, an owner or operator may elect to comply with paragraph (c)(1)(i) of this section by transferring the waste offsite to another facility where the waste is treated in accordance with the requirements of paragraph (c)(1)(i) of this section. The owner or operator transferring the waste shall:

(1) Comply with the standards specified in Secs. 61.343 through 61.347 of this subpart for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.

(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 this subpart.

A. State and Federally Enforcable Section (continued)

18.g 40 CFR, Section 61.342 Standards: General (continued)

(g) Compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in Sec. 61.355 of this subpart.

18.h 40 CFR, Section 61.342 Standards: General (continued)

(h) Permission to use an alternative means of compliance to meet the requirements of Secs. 61.342 through 61.352 of this subpart may be granted by the Administrator as provided in Sec. 61.353 of this subpart.

19.a 40 CFR, Section 61.343 Standards: Tanks

(a) Except as provided in paragraph (b) of this section and in Sec. 61.351, the owner or operator shall meet the following standards for each tank in which the waste stream is placed in accordance with Sec. 61.342 (c)(1)(ii). The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

(1) The owner or operator 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) The fixed-roof shall meet the following requirements:

(A) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in Sec. 61.355(h) of this subpart.

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(C) If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of this section does not apply to any opening that meets all of thefollowing conditions:

(1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(2) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in Sec. 61.355(h); and

(3) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Sec. 61.349 of this subpart.

(2) The owner or operator 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 paragraph (e) of this section.

A. State and Federally Enforcable Section (continued)

19.b 40 CFR, Section 61.343 Standards: Tanks (continued)

(b) For a tank that meets all the conditions specified in paragraph (b)(1) of this section, the owner or operator may elect to comply with paragraph (b)(2) of this section as an alternative to the requirements specified in paragraph (a)(1) of this section.

(1) The waste managed in the tank complying with paragraph (b)(2) of this section shall meet all of the following conditions:

(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) The waste managed in the tank either:

(A) Has a maximum organic vapor pressure less than 5.2 kilopascals (kPa) (0.75 pounds per square inch (psi));

(B) Has a maximum organic vapor pressure less than 27.6 kPa (4.0 psi) and is managed in a tank having design capacity less than 151 m\3\ (40,000 gal); or

(C) Has a maximum organic vapor pressure less than 76.6 kPa (11.1 psi) and is managed in a tank having a design capacity less than 75 m\3\ (20,000 gal).

(2) The owner or operator shall install, operate, and maintain a fixed roof as specified in paragraph (a)(1)(i).

(3) For each tank complying with paragraph (b) of this section, 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.

19.c 40 CFR, Section 61.343 Standards: Tanks (continued)

(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.

(d) Except as provided in Sec. 61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

(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 owner or operator must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements 40 CFR 264.1084(i) or 40 CFR 265(i) is not required to make repeat demonstrations of initial and continuous compliance for the purposes of this subpart.

(2) [Reserved]

(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 section.

A. State and Federally Enforcable Section (continued)

20.a 40 CFR, Section 61.343 Standards: Tanks (continued)

(4) The closed-vent system must be designed and operated in accordance with the requirements of ? 61.349.

40 CFR, Section 61.344 Standards: Surface Impoundments

This section of the regulation is not applicable to this permittee.

40 CFR, Section 61.345 Standards: Containers

(a) The owner or operator shall meet the following standards for each container in which waste is placed in accordance with Sec. 61.342(c)(1)(ii) of this subpart:

(1) The owner or operator shall install, operate, and maintain a cover on each container used to handle, transfer, or store waste in accordance with the following requirements:

(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 Sec. 61.355(h) of this subpart.

(ii) Except as provided in paragraph (a)(4) of this section, 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.

(2) When a waste is transferred into a container by pumping, the owner or operator shall perform the transfer using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover, and any openings complying with paragraph (a)(4) of this section.

(3) Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the owner or operator in a manner such that whenever it is necessary for the container to be open while the waste is being treated, the container is located under a cover (e.g. enclosure) with a closed-vent system that routes all organic vapors vented from the container to a control device, except for cover and closed-vent systems that meet the requirements in paragraph (a)(4) of this section.

(i) The owner or operator must either:

(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 this section; or

(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 this section.

(ii) The owner or operator must meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

A. State and Federally Enforcable Section (continued)

20.b 40 CFR, Section 61.345 Standards: Containers (continued)

(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 owner or operator 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 this subpart.

(B) The closed-vent system and control device must be designed and operated in accordance with the requirements of Sec. 61.349.

(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 Sec. 61.355(h).

(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 paragraph (e)(1) of this section.

21.a (4) If the cover and closed-vent system operate such that the container is maintained at a pressure less than atmospheric pressure, the owner or operator may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by methods specified in Sec. 61.355(h); and

(iii) The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.

(b) Each cover and all openings shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly.

(c) Except as provided in Sec. 61.350 of this subpart, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

40 CFR, Section 61.348 Standards: Treatment Processes

(a) Except as provided in paragraph (a)(5) of this section, the owner or operator shall treat the waste stream in accordance with the following requirements:

(1) The owner or operator shall design, install, operate, and maintain a treatment process that either:

(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) Removes benzene from the waste stream by 99 percent or more on a mass basis, or

(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.

A. State and Federally Enforcable Section (continued)

(2) Each treatment process complying with paragraphs (a)(1)(i) or (a)(1)(ii) of this section shall be designed and operated in accordance with the appropriate waste management unit standards specified in Secs. 61.343 through 61.347 of this subpart. For example, if a treatment process is a tank, then the owner or operator shall comply with Sec. 61.343 of this subpart.

(3) For the purpose of complying with the requirements specified in paragraph (a)(1)(i) of this section, 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.

(4) An owner or operator 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 this section except as provided in paragraph (a)(5) of this section.

(5) If an owner or operator aggregates or mixes any combination of process wastewater, product tank drawdown, or landfill leachate subject to Sec. 61.342(c)(1) of this subpart together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with paragraph (b) of this section. These provisions apply to above-ground wastewater treatment systems as well as those that are at or below ground level.

21.b 40 CFR, Section 61.348 Standards: Treatment Processes (continued)

(b) Except for facilities complying with Sec. 61.342(e), the owner or operator that aggregates or mixes individual waste streams as defined in paragraph (a)(5) of this section for management and treatment in a wastewater treatment system shall comply with the following requirements:

(1) The owner or operator shall design and operate each waste management unit that comprises the wastewater treatment system in accordance with the appropriate standards specified in Secs. 61.343 through 61.347 of this subpart.

(2) The provisions of paragraph (b)(1) of this section do not apply to any waste management unit that the owner or operator demonstrates to meet the following conditions initially and, thereafter, at least once per year:

(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 Sec. 61.355(c) of this subpart; and

(ii) The total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units comprising the facility wastewater treatment systems is less than 1 Mg/yr (1.1 ton/yr). For this determination, total annual benzene quantity shall be calculated as follows:

(A) The total annual benzene quantity shall be calculated as the sum of the individual benzene quantities determined at each location where a waste stream first enters an exempt waste management unit. The benzene quantity discharged from an exempt waste management unit shall not be included in this calculation.

(B) The annual benzene quantity in a waste stream managed or treated in an enhanced biodegradation unit shall not be included in the calculation of the total annual benzene quantity, if the enhanced biodegradation unit is the first exempt unit in which the waste is managed or treated. A unit shall be considered enhanced biodegradation if it is a suspended-growth process that generates biomass, uses recycled biomass, and periodically removes biomass from the process. An enhanced biodegradation unit typically operates at a food-to-microorganism ratio in the range of 0.05 to 1.0 kg of biological oxygen demand per kg of biomass per day, a mixed liquor suspended solids ratio in the range of 1 to 8 grams per liter (0.008 to 0.7 pounds per liter), and a residence time in the range of 3 to 36 hours.

A. State and Federally Enforcable Section (continued)

21.c 40 CFR, Section 61.348 Standards: Treatment Processes (continued)

(c) The owner and operator shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in paragraph (d) of this section, achieves the appropriate conditions specified in paragraphs (a) or (b) of this section in accordance with the following requirements:

(1) Engineering calculations in accordance with requirements specified in Sec. 61.356(e) of this subpart; or

(2) Performance tests conducted using the test methods and procedures that meet the requirements specified in Sec. 61.355 of this subpart.

21.d 40 CFR, Section 61.348 Standards: Treatment Processes (continued)

(d) A treatment process or waste stream is in compliance with the requirements of this subpart and exempt from the requirements of paragraph (c) of this section provided that the owner or operator documents that the treatment process or waste stream is incompliance with other regulatory requirements as follows:

(1) The treatment process is 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;

(2) This paragraph of the regulation is not applicable to this permittee.

(3) This paragraph of the regulation is not applicable to this permittee.

(4) This paragraph of the regulation is not applicable to this permittee.

(5) This paragraph of the regulation is not applicable to this permittee.

21.e 40 CFR, Section 61.348 Standards: Treatment Processes (continued)

(e) Except as specified in paragraph (e)(3) of this section, 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.

(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.

(2) Except as provided in Sec. 61.350 of this subpart, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

(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 owner or operator may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in Sec. 61.355(h); and

(iii) The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.

A. State and Federally Enforcable Section (continued)

21.f 40 CFR, Section 61.348 Standards: Treatment Processes (continued)

(f) Except for treatment processes complying with paragraph (d) of this section, the Administrator may request at any time an owner or operator demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in paragraphs (a) or (b) of this section by conducting a performance test using the test methods and procedures as required in Sec. 61.355 of this subpart.

(g) The owner or operator of a treatment process or wastewater treatment system unit that is used to comply with the provisions of this section shall monitor the unit in accordance with the applicable requirements in Sec. 61.354 of this subpart.

22.a 40 CFR, Section 61.349 Standards: Closed-vent Systems and Control Devices

(a) For each closed-vent system and control device used to comply with standards in accordance with Secs. 61.343 through 61.348 of this subpart, the owner or operator shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:

(1) The closed-vent system shall:

(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 Sec. 61.355(h) of this subpart.

(ii) Vent systems that contain any bypass line that could divert the vent stream away from a control device used to comply with the provisions of this subpart shall install, maintain, and operate according to 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 this section.

(A) The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.

(B) Where the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration, a flow indicator is not required.

(iii) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

A. State and Federally Enforcable Section (continued)

(iv) For each closed-vent system complying with paragraph (a) of this section, 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.

(2) The control device shall be designed and operated in accordance with the following conditions:

(i) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:

(A) Reduce the organic emissions vented to it by 95 weight percent or greater;

(B) Achieve a total organic compound concentration of 20 ppmv (as the sum of the concentrations for individual compounds using Method 18) on a dry basis corrected to 3 percent oxygen; or

(C) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760 deg.C. 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) 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) A flare shall comply with the requirements of 40 CFR 60.18.

(iv) A control device other than those described in paragraphs (a)(2) (i) through (iii) of this section may be used provided that the following conditions are met:

(A) The device shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

(B) The owner or operator shall develop test data and design information that documents the control device will achieve an emission control efficiency of either 95 percent or greater for organic compounds or 98 percent or greater for benzene.

(C) The owner or operator shall identify:

(1) The critical operating parameters that affect the emission control performance of the device;

(2) The range of values of these operating parameters that ensure the emission control efficiency specified in paragraph (a)(2)(iv)(A) of this section is maintained during operation of the device; and

(3) How these operating parameters will be monitored to ensure the proper operation and maintenance of the device.

(D) The owner or operator shall submit the information and data specified in paragraphs (a)(2)(iv) (B) and (C) of this section to the Administrator prior to operation of the alternative control device.

(E) The Administrator will determine, based on the information submitted under paragraph (a)(2)(iv)(D) of this section, if the control device subiect to paragraph (a)(2)(iv) of this section meets the requirements of Sec. 61.349. The control device subject to paragraph (a)(2)(iv) of this section may be operated prior to receiving approval from the Administrator. However, if the Administrator determines that the control device does not meet the requirements of Sec. 61.349, the facility may be subject to enforcement action beginning from the time the control device began operation.

A. State and Federally Enforcable Section (continued)

22.b 40 CFR, Section 61.349 Standards: Closed-vent Systems and Control Devices (continued)

(b) Each closed-vent system and control device used to comply with this subpart shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

(c) An owner and operator shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in paragraph (a)(2) of this section by using one of the following methods:

(1) Engineering calculations in accordance with requirements specified in Sec. 61.356(f) of this subpart; or

(2) Performance tests conducted using the test methods and procedures that meet the requirements specified in Sec. 61.355 of this subpart.

(d) An owner or operator shall demonstrate compliance of each flare in accordance with paragraph (a)(2)(iii) of this section.

(e) The Administrator may request at any time an owner or operator demonstrate that a control device meets the applicable conditions specified in paragraph (a)(2) of this section by conducting a performance test using the test methods and procedures as required in Sec. 61.355, and for control devices subject to paragraph (a)(2)(iv) of this section, the Administrator may specify alternative test methods and procedures, as appropriate.

(f) Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visable defects such as holes in ductwork or piping and loose connections.

22.c 40 CFR, Section 61.349 Standards: Closed-vent Systems and Control Devices (continued)

(g) Except as provided in Sec. 61.350 of this subpart, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

(h) The owner or operator of a control device that is used to comply with the provisions of this section shall monitor the control device in accordance with Sec. 61.354(c) of this subpart.

23. 40 CFR, Section 61.350 Standards: Delay of Repair

(a) Delay of repair of facilities or units that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

(b) Repair of such equipment shall occur before the end of the next facility or unit shutdown.

40 CFR, Section 61.351 Alternative standards for tanks

This section of the regulation is not applicable to this permittee

40 CFR, Section 61.352 Alternative standards for oil-water separators

This section of the regulation is not applicable to this permittee

40 CFR, Section 61.353 Alternative means of emission limitation

This section of the regulation is not applicable to this permittee

A. State and Federally Enforcable Section (continued)

24.a 40 CFR, Section 61.354 Monitoring Requirements

(a) This paragraph of the regulation is not applicable to this permittee.

(b) This paragraph of the regulation is not applicable to this permittee.

(c) An owner or operator subject to the requirements in Sec. 61.349 of this subpart shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator. The owner or operator 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.

(1) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of <plus-minus>1 percent of the temperature being monitored in deg.C or <plus-minus>0.5 deg.C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(2) This paragraph is not applicable to this permittee.

(3) This paragraph is not applicable to this permittee.

(4) This paragraph is not applicable to this permittee.

(5) This paragraph of the regulation is not applicable to this permittee.

(6) For a condenser, either:

(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) 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 <plus-minus>1 percent of the temperature being monitored in deg.C or <plus-minus>0.5 deg.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.

(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) 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) 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.

(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.

(9) For a control device subject to the requirements of Sec. 61.349(a)(2)(iv), devices to monitor the parameters as specified in Sec. 61.349(a)(2)(iv)(C).

A. State and Federally Enforcable Section (continued)

24.b 40 CFR, Section 61.354 Monitoring Requirements (continued)

(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, an owner or operator 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.

24.c 40 CFR, Section 61.354 Monitoring Requirements (continued)

(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.

(f) Owners or operators using a closed-vent system that contains any bypass line that could divert a vent stream from a control device used to comply with the provisions of this subpart shall do the following:

(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 Sec. 61.349(a)(1)(ii) to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

(2) Visually inspect the readings from each flow monitoring device required by Sec. 61.349(a)(1)(ii) at least once each operating day to check that vapors are being routed to the control device as required.

(g) Each owner or operator 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.

A. State and Federally Enforcable Section (continued)

25.a 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions.

(a) An owner or operator shall determine the total annual benzene quantity from facility waste by the following procedure:

(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 Sec. 61.342(a), the owner or operator shall:

(i) Determine the annual waste quantity for each waste stream using the procedures specified in paragraph (b) of this section.

(ii) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in paragraph (c) of this section.

(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.

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

(3) If the total annual benzene quantity from facility waste is equal to or greater than 10 mg/yr, then the owner or operator shall comply with the requirements of Sec. 61.342 (c), (d), or (e).

(4) If the total annual benzene quantity from facility waste is less than 10 Mg/yr but is equal to or greater than 1 Mg/yr, then the owner or operator shall:

(i) Comply with the recordkeeping requirements of Sec. 61.356 and reporting requirements of Sec. 61.357 of this subpart; and

(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 or more.

(5) If the total annual benzene quantity from facility waste is less than 1 Mg/yr, then the owner or operator shall:

(i) Comply with the recordkeeping requirements of Sec. 61.356 and reporting requirements of Sec. 61.357 of this subpart; and

(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 or more.

(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 this section, 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 this section. 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.

A. State and Federally Enforcable Section (continued)

25.b 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions (continued)

(b) For purposes of the calculation required by paragraph (a) of this section, an owner or operator shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in paragraphs (b) (1), (2), (3), and (4) of this section, by one of the methods given in paragraphs (b) (5) through (7) of this section.

(1) This paragraph of the regulation is not applicable to this permittee.

(2) This paragraph of the regulation is not applicable to this permittee.

(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.

(4) This paragraph of the regulation is not applicable to this permittee.

(5) This paragraph of the regulation is not applicable to this permittee.

(6) This paragraph of the regulation is not applicable to this permittee.

(7) This paragraph of the regulation is not applicable to this permittee.

25.c 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions (continued)

(c) For the purposes of the calculation required by Secs. 61.355(a) of this subpart, an owner or operator shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in paragraph (c)(1) of this section using either of the methods given in paragraphs (c)(2) and (c)(3) of this section.

(1) The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

(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 this section.

(A) The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

(B) The determination for wastes at coke by-product plants subject to and complying with the control requirements of Sec. 61.132, 61.133, 61.134, or 61.139 of subpart L of this part shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:

(1) The transfer of wastes between units complying with the control requirements of subpart L of this part, process units, and the ammonia still is made through hard piping or other enclosed system.

(2) The ammonia still meets the definition of a sour water stripper in Sec. 61.341.

(C) The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

A. State and Federally Enforcable Section (continued)

(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 this section. 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 this section for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

(ii) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

(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.

(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 this section.

(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.

(2) Knowledge of the waste. The owner or operator 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 owner or operator 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 an owner or operator and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under paragraph (c)(3) of this section shall be used to resolve the disagreement.

(3) Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

(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.

(ii) For waste in enclosed pipes, the following procedures shall be used:

(A) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.

A. State and Federally Enforcable Section (continued)

(B) A static mixer shall be installed in the process line or in a by-pass line unless the owner or operator demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

(C) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(D) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(E) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.

(F) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10 deg.C.

(G) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(H) The sample containers shall immediately be cooled and maintained at a temperature below 10 deg.C for transfer to the laboratory.

(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.

(iv) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(A) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in Sec. 61.18 of this part);

A. State and Federally Enforcable Section (continued)

(B) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in Sec. 61.18 of this part);

(C) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in Sec. 61.18 of this part);

(D) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in Sec. 61.18 of this part);

(E) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or

(F) Method 624, Purgeables, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

(v) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

C = (1/Qt) x summation of i from 1 to n of (Qi x Ci)

Where:

C =Flow-weighted annual average benzene concentration for waste stream, ppmw.

Qt=Total annual waste quantity for waste stream, kg/yr (lb/yr).

n=Number of waste samples (at least 3).

Qi=Annual waste quantity for waste stream represented by Ci, kg/yr (lb/yr).

Ci=Measured concentration of benzene in waste sample i, ppmw.

(d) This paragraph of the regulation is not applicable to this permittee.

A. State and Federally Enforcable Section (continued)

25.d 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions (continued)

(e) This paragraph of the regulation is not applicable to this permittee.

(f) An owner or operator using performance tests to demonstrate compliance of a treatment process with Sec. 61.348(a)(1)(iii) of this subpart shall determine the benzene destruction efficiency for the combustion unit by the following procedure:

(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 owner or operator shall record all process information necessary to document the operating conditions during the test.

(2) All testing equipment shall be prepared and installed as specified in the appropriate test methods

(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 this section.Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene into the combustion unit is calculated as follows:

Eb = (K/(n x 10E6)) x summation of i from 1 to n of (Vi x Ci)

Where:

Eb = Mass flow rate of benzene entering the treatment process, kg/hr (lb/hr).

K = Density of the waste stream, kg/m 3 (lb/ft 3).

Vi = Average volume flow rate of waste entering the treatment process during each run i, m 3/hr (ft 3/hr).

A. State and Federally Enforcable Section (continued)

Ci = Average concentration of benzene in the waste stream entering the treatment process during each run i, ppmw.

n = Number of runs.

(4) The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:

(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.

(ii) A run shall consist of a 1-hour period during the test. For each run:

(A) The reading from each measurement shall be recorded;

(B) The volume exhausted shall be determined using method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate.

(C) The average benzene concentration in the exhaust downstream of the combustion unit shall be determined using method 18 from appendix A of 40 CFR part 60.

(iii) The mass of benzene emitted during each run shall be calculated as follows:

Mi = Db x V x C x 10E-6 Where:

Mi = Mass of benzene emitted during run i, kg (lb).

V = Volume of air-vapor mixture exhausted at standard conditions, m3 (ft3).

C = Concentration of benzene measured in the exhaust, ppmv.

Db = Density of benzene, 3.24 kg/m3 (0.202 lb/ft3).

(iv) The benzene mass emission rate in the exhaust shall be calculated as follows:

Ea = (summation of i from 1 to n of (Mi))/T Where:

Ea = Mass flow rate of benzene emitted from the combustion unit, kg/hr (lb/hr).

Mi = Mass of benzene emitted from the combustion unit during run i, kg (lb).

T = Total time of all runs, hr.

n = Number of runs.

(5) The benzene destruction efficiency for the combustion unit shall be calculated as follows:

R = ((Eb - Ea)/Eb) x 100

A. State and Federally Enforcable Section (continued)

25.e 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions (continued)

where:

R = Benzene destruction efficiency for the combustion unit, percent.

Eb = Mass flow rate of benzene entering the combustion unit, kg/hr (lb/hr).

Ea = Mass flow rate of benzene emitted from the combustion unit, kg/hr (lb/hr).

(g) This paragraph of the regulation is not applicable to this permittee.

(h) An owner or operator shall test equipment for compliance with no detectable emissions as required in Secs. 61.343 through 61.347, and Sec. 61.349 of this subpart in accordance with the following requirements:

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

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

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

(4) Calibration gases shall be:

(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 approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The background level shall be determined as set forth in method 21.

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

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

A. State and Federally Enforcable Section (continued)

25.f 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions (continued)

(i) An owner or operator 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 Sec. 61.349(a)(2) shall use the following procedures:

(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 owner or operator shall record all process information necessary to document the operating conditions during the test.

(2) Sampling sites shall be selected using method 1 or 1A from appendix A of 40 CFR part 60, as appropriate.

(3) The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:

(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.

(ii) A run shall consist of a 1-hour period during the test. For each run:

(A) The reading from each measurement shall be recorded;

(B) The volume exhausted shall be determined using method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate;

(C) The organic concentration or the benzene concentration, as appropriate, in the vent stream entering and exiting the control shall be determined using Method 18 from Appendix A of 40 CFR part 60.

A. State and Federally Enforcable Section (continued)

(iii) The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:

Maj = (K1 x Vaj/10E6) x summation of i from 1 to n of (Cai x MWi) and

Mbj = (K1 x Vbj/10E6) x summation of i from 1 to n of (Cbi x MWi)

Where:

Maj = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb).

Mbj = Mass of organics or benzene in the vent stream exiting the control device during run j, kg (lb).

Vaj = Volume of vent stream entering the control device during run j, at standard conditions, m3 (ft3).

Vbj = Volume of vent stream exiting the control device during run j, at standard conditions, m3 (ft3).

Cai = Organic concentration of compound i or the benzene concentration measured in the vent stream entering the control device as determined by Method 18, ppm by volume on a dry basis.

Cbi = Organic concentration of compound i or the benzene concentration measured in the vent stream exiting the control device as determined by Method 18, ppm by volume on a dry basis.

MWi = Molecular weight of organic compound i in the vent stream, or the molecular weight of benzene, kg/kg-mol (lb/lb-mole).

n = Number of organic compounds in the vent stream; if benzene reduction efficiency is being demonstrated, then n=1.

K1 = Conversion factor for molar volume at standard conditions (293 K and 760 mm Hg (527 R and 14.7 psia)) = 0.0416 kg-mol/m3 (0.00118 lb-mol/ft3)

10E6=Conversion factor for ppmv.

(iv) The mass flow rate of organics or benzene entering and exiting the control device shall be calculated as follows:

Ea - summation of j from 1 to n of (Maj)/T and

Eb - summation of j from 1 to n of (Mbj)/T

Where:

Ea = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).

Eb = Mass flow rate of organics or benzene exiting the control device, kg/hr (lb/hr).

A. State and Federally Enforcable Section (continued)

Maj = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb).

Mbj = Mass of organics or benzene in the vent stream exiting the control device during run j, kg (lb).

T = Total time of all runs, hr.

n = Number of runs.

(4) The organic reduction efficiency or the benzene reduction efficiency for the control device shall be calculated as follows:

R = ((Ea-Eb)/Ea) x 100

Where:

R = Total organic reduction of efficiency or benzene reduction efficiency for the control device, percent.

Eb = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).

Ea = Mass flow rate of organic or benzene emitted from the control device, kg/hr (lb/hr).

25.g 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions (continued)

(j) An owner or operator shall determine the benzene quantity for the purposes of the calculation required by Sec. 61.342 (c)(3)(ii)(B) according to the provisions of paragraph (a) of this section, except that the procedures in paragraph (a) of this section shall also apply to wastes with a water content of 10 percent or less.

25.h 40 CFR, Section 61.355 Test methods, procedures, and compliance provisions (continued)

(k) An owner or operator shall determine the benzene quantity for the purposes of the calculation required by Sec. 61.342(e)(2) by the following procedure:

(1) For each waste stream that is not controlled for air emissions in accordance with Sec. 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 this section, except that paragraph (b)(4) of this section 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 Sec. 61.342(e)(2).

(2) For each waste stream that is controlled for air emissions in accordance with Sec. 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a), as applicable to the waste management unit that manages the waste, the determination of annual waste quantity and flow-weighted annual average benzene concentration shall be made at the first applicable location as described in paragraphs (k)(2)(i), (k)(2)(ii), and (k)(2)(iii) of this section 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 this section.

(i) Where the waste stream enters the first waste management unit not complying with Secs. 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a) that are applicable to the waste management unit,

(ii) For each waste stream that is managed or treated only in compliance with Secs. 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

A. State and Federally Enforcable Section (continued)

(iii) For wastes managed in units controlled for air emissions in accordance with Secs. 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 this section 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.

(iv) Annual waste quantity shall be determined using the procedures in paragraphs (b)(5), (6), or (7) of this section, and

(v) The flow-weighted annual average benzene concentration shall be determined using the procedures in paragraphs (c)(2) or (3) of this section.

(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 this section 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 this section.

(4) The benzene in waste entering an enhanced biodegradation unit, as defined in Sec. 61.348(b)(2)(ii)(B), shall not be included in the determination of benzene quantity, determined in paragraph (k)(6) of this section, if the following conditions are met:

(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

(ii) All prior waste management units managing the waste comply with Secs. 61.343, 61.344, 61.345, 61.346, 61.347 and 61.348(a).

(5) The benzene quantity for each waste stream in paragraph (k)(2) of this section shall be determined by multiplying the annual waste quantity of each waste stream times its flow-weighted annual average benzene concentration.

(6) The total benzene quantity for the purposes of the calculation required by Sec. 61.342(e)(2) shall be determined by adding together the benzene quantities determined in paragraphs (k)(1) and (k)(5) of this section for each applicable waste stream.

(7) If the benzene quantity determined in paragraph (6) of this section exceeds 6.0 Mg/yr (6.6 ton/yr) only because of multiple counting of the benzene quantity for a waste stream, the owner or operator may use the following procedures for the purposes of the calculation required by Sec. 61.342(e)(2):

(i) Determine which waste management units are involved in the multiple counting of benzene;

(ii) Determine the quantity of benzene that is emitted, recovered, or removed from the affected units identified in paragraph (k)(7)(i) of this section, or destroyed in the units if applicable, using either direct measurements or the best available estimation techniques developed or approved by the Administrator.

(iii) Adjust the benzene quantity to eliminate the multiple counting of benzene based on the results from paragraph (k)(7)(ii) of this section and determine the total benzene quantity for the purposes of the calculation required by Sec. 61.342(e)(2).

(iv) Submit in the annual report required under Sec. 61.357(a) a description of the methods used and the resulting calculations for the alternative procedure under paragraph (k)(7) of this section, the benzene quantity determination from paragraph (k)(7)(iii) of this section.

A. State and Federally Enforcable Section (continued)

26.a 40 CFR, Section 61.356 Record keeping Requirements

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

(b) Each owner or operator shall maintain records that identify each waste stream at the facility subject to this subpart, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the owner or operator shall maintain the following records:

(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.

(2) For each waste stream exempt from Sec. 61.342(c)(1) in accordance with Sec. 61.342(c)(3), the records shall include:

(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 Sec. 61.342(c)(3)(i), or

(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 (2.2ton/yr) in accordance with Sec. 61.342(c)(3)(ii).

(3) For each facility where process wastewater streams are controlled for benzene emissions in accordance with Sec. 61.342(d) of this subpart, the records shall include for each treated process wastewater stream all measurements, calculations, and other documentation used to determine the annual benzene quantity in the process wastewater stream exiting the treatment process.

(4) For each facility where waste streams are controlled for benzene emissions in accordance with Sec. 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).

(5) For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with Sec. 61.355(b)(5), the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with Sec. 61.355(b)(5), the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with Sec. 61.355(a)(1)(iii) of this section.

(6) For each facility where wastewater streams are controlled for benzene emissions in accordance with Sec. 61.348(b)(2), the records shall include all measurements, calculations, and other documentation used to determine the annual benzene content of the waste streams and the total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units.

A. State and Federally Enforcable Section (continued)

26.b 40 CFR, Section 61.356 Record keeping Requirements (continued)

(c) An owner or operator transferring waste off-site to another facility for treatment in accordance with Sec. 61.342(f) shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.

(d) An owner or operator using control equipment in accordance with Secs. 61.343 through 61.347 shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment. If a control device is used, then the owner or operator shall maintain the control device records required by paragraph (f) of this section.

26.c 40 CFR, Section 61.356 Record keeping Requirements (continued)

(e) An owner or operator using a treatment process or wastewater treatment system unit in accordance with Sec. 61.348 of this subpart shall maintain the following records. The documentation shall be retained for the life of the unit.

(1) A statement signed and dated by the owner or operator 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.

(2) If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the owner or operator 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.

(3) If performance tests are used to determine treatment process or wastewater treatment system unit performance, then the owner or operator shall maintain all test information necessary to demonstrate the unit performance.

(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) 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) Records of unit operating conditions during each test run including all key process parameters.

(iv) All test results.

(4) If a control device is used, then the owner or operator shall maintain the control device records required by paragraph (f) of this section.

A. State and Federally Enforcable Section (continued)

26.d 40 CFR, Section 61.356 Record keeping Requirements (continued)

(f) An owner or operator using a closed-vent system and control device in accordance with Sec. 61.349 of this subpart shall maintain the following records. The documentation shall be retained for the life of the control device.

(1) A statement signed and dated by the owner or operator 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.

(2) If engineering calculations are used to determine control device performance in accordance with Sec. 61.349(c), then a design analysis for the control device that includes for example:

(i) Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) This paragraph of the regulation is not applicable to this permittee.

(C) This paragraph of the regulation is not applicable to this permittee.

(D) This paragraph of the regulation is not applicable to this permittee.

(E) For a condenser, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level or the design outlet benzene concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system that regenerates the carbon bed directly on-site in the control device such as a fixed-bed adsorber, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

A. State and Federally Enforcable Section (continued)

(G) For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(H) For a control device subject to the requirements of Sec. 61.349(a)(2)(iv), the design analysis shall consider the vent stream composition, constituent concentration, and flow rate. The design analysis shall also include all of the information submitted under Sec. 61.349 (a)(2)(iv).

ii. Reserved

(3) If performance tests are used to determine control device performance in accordance with Sec. 61.349(c) of this subpart:

(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) 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) 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) All test results.

26.e 40 CFR, Section 61.356 Record keeping Requirements (continued)

(g) An owner or operator shall maintain a record for each visual inspection required by Secs. 61.343 through 61.347 of this subpart that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

26.f 40 CFR, Section 61.356 Record keeping Requirements (continued)

(h) An owner or operator shall maintain a record for each test of no detectable emissions required by Secs. 61.343 through 61.347 and Sec. 61.349 of this subpart. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

A. State and Federally Enforcable Section (continued)

26.g 40 CFR, Section 61.356 Record keeping Requirements (continued)

(i) This paragraph of the regulation is not applicable to this permittee.

(j) For each control device, the owner or operator shall maintain documentation that includes the following information regarding the control device operation:

(1) Dates of startup and shutdown of the closed-vent system and control device.

(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.

(3) Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

(i) Any valve car-seal or closure mechanism required under Sec. 61.349(a)(1)(ii) is broken or the by-pass line valve position has changed.

(ii) The flow monitoring devices required under Sec. 61.349(a)(1)(ii) indicate that vapors are not routed to the control device as required.

(4) If a thermal vapor incinerator is used, then the owner or operator 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 deg.C below the design combustion zone temperature.

(5) This paragraph of the regulation is not applicable to this permittee.

(6) This paragraph of the regulation is not applicable to this permittee.

(7) This paragraph of the regulation is not applicable to this permittee.

(8) If a condenser is used, then the owner or operator shall maintain records from the monitoring device of the parameters selected to be monitored in accordance with Sec. 61.354(c)(6). If concentration of organics or concentration of benzene in the control device outlet gas stream is monitored, then the owner or operator 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 owner or operator shall record all 3-hour periods of operation during which the temperature of the condenser exhaust vent stream is more than 6 deg. C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6 deg. C above the design average coolant fluid temperature at the condenser outlet.

(9) If a carbon adsorber is used, then the owner or operator 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 owner or operator 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 owner or operator shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.

A. State and Federally Enforcable Section (continued)

(10) If a carbon adsorber that is not regenerated directly on site 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 then the existing carbon in the control device is replaced with fresh carbon.

(11) If an alternative operational or process parameter is monitored for a control device, as allowed in Sec. 61.354(e) of this subpart, then the owner or operator shall maintain records of the continuously monitored parameter, including periods when the device is not operated as designed.

(12) If a control device subject to the requirements of Sec.61.349(a)(2)(iv) is used, then the owner or operator shall maintain records of the parameters that are monitored and each occurrence when the parameters monitored are outside the range of values specified in Sec. 61.349(a)(2)(iv)(C), or other records as specified by the Administrator.

26.h 40 CFR, Section 61.356 Record keeping Requirements (continued)

(k) An owner or operator who elects to install and operate the control equipment in Sec. 61.351 of this subpart shall comply with the recordkeeping requirements in 40 CFR 60.115b.

(l) An owner or operator who elects to install and operate the control equipment in Sec. 61.352 of this subpart shall maintain records of the following:

(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.

(2) Results of the seal gap measurements required by 40 CFR 60.693-2(a).

(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 owner or operator 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.

(n) Each owner or operator using a total enclosure to comply with control requirements for tanks in ? 61.343 or the control requirements for containers in ? 61.345 must keep the records required in paragraphs (n)(1) and (2) of this section. Owners or operators 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 recordkeeping requirement in paragraph (n)(1) of this section. The owner or operator must make the records of each verification of a total enclosure available for inspection upon request.

(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;

(2) Records required for a closed-vent system and control device according to the requirements in paragraphs (d) (f), and (j) of this section.

A. State and Federally Enforcable Section (continued)

27.a 40 CFR, Section 61.357 Reporting Requirements

(a) Each owner or operator of a chemical plant, petroleum refinery, coke by-product recovery plant, and any facility managing wastes from these industries shall submit to the Administrator within 90 days after January 7, 1993, or by the initial startup for a new source with an initial startup after the effective date, a report that summarizes the regulatory status of each waste stream subject to Sec. 61.342 and is determined by the procedures specified in Sec. 61.355(c) to contain benzene. Each owner or operator subject to this subpart who has no benzene onsite in wastes, products, by-products, or intermediates shall submit an initial report that is a statement to this effect. For all other owners or operators subject to this subpart, the report shall include the following information:

(1) Total annual benzene quantity from facility waste determined in accordance with Sec. 61.355(a) of this subpart.

(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 of this subpart.

(3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart the following information shall be added to the table:

(i) Whether or not the water content of the waste stream is greater than 10 percent;

(ii) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(iii) Annual waste quantity for the waste stream;

(iv) Range of benzene concentrations for the waste stream;

(v) Annual average flow-weighted benzene concentration for the waste stream; and

(vi) Annual benzene quantity for the waste stream.

(4) The information required in paragraphs (a) (1), (2), and (3) of this section should represent the waste stream characteristics based on current configuration and operating conditions. An owner or operator 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 Sec. 61.10(a).

27.b 40 CFR, Section 61.357 Reporting Requirements (continued)

(b) If the total annual benzene quantity from facility waste is less than 1 Mg/yr, then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section 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 or more.

(c) If the total annual benzene quantity from facility waste is less than 10 Mg/yr but is equal to or greater than 1 Mg/yr, then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. 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 or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of this section is not changed in the following year, the owner or operator may submit a statement to that effect.

A. State and Federally Enforcable Section (continued)

27.c 40 CFR, Section 61.357 Reporting Requirements (continued)

(d) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr, then the owner or operator shall submit to the Administrator the following reports:

(1) Within 90 days after January 7, 1993, unless a waiver of compliance under Sec. 61.11 of this part is granted, or by the date of initial startup for a new source with an initial startup after the effective date, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this subpart. If a waiver of compliance is granted under Sec. 61.11, the certification of equipment necessary to comply with these standards shall be submitted by the date the waiver of compliance expires.

(2) Beginning on the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit annually to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of this section is not changed in the following year, the owner or operator may submit a statement to that effect.

(3) If an owner or operator elects to comply with the requirements of Sec. 61.342(c)(3)(ii), then the report required by paragraph (d)(2) of this section shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.

(4) If an owner or operator elects to comply with the alternative requirements of Sec. 61.342(d) of this subpart, then he shall include in the report required by paragraph (d)(2) of this section a table presenting the following information for each process wastewater stream:

(i) Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of this subpart;

(ii) For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(iii) For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of this subpart, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(5) If an owner or operator elects to comply with the alternative requirements of Sec. 61.342(e), then the report required by paragraph (d)(2) of this section shall include a table presenting the following information for each waste stream:

(i) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart; the table shall report the following information for the waste stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(ii) For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of this subpart; the table shall report the following information for the waste stream as determined at the applicable location described in Sec. 61.355(k)(2):

A. State and Federally Enforcable Section (continued)

Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(6) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

(7) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit a report quarterly to the Administrator that includes:

(i) If a treatment process or wastewater treatment system unit is monitored in accordance with Sec. 61.354(a)(1) of this subpart, then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

(ii) If a treatment process or wastewater treatment system unit is monitored in accordance with Sec. 61.354(a)(2) of this subpart, then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.

(iii) If a treatment process or wastewater treatment system unit is monitored in accordance with Sec. 61.354(b), then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr.

(iv) For a control device monitored in accordance with Sec. 61.354(c) of this subpart, each period of operation monitored during which any of the following conditions occur, as applicable to the control device:

(A) Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device, is more than 28 deg.C below the design combustion zone temperature.

(B) Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic vapor incinerator, as measured by the temperature monitoring device, is more than 28 deg.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.

(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, as mesured by the temperature monitoring device, is more than 28 deg.C below the design combustion zone temperature.

(D) Each 3-hour period of operation during which the average concentration of organics or the average concentration of benzene in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design concentration level of organics or benzene in the exhaust gas.

A. State and Federally Enforcable Section (continued)

(E) Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6 deg.C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6 deg.C above the design average coolant fluid temperature at the condenser outlet.

(F) Each period in which the pilot flame of a flare is absent.

(G) Each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone of a boiler or process heater as required by Sec. 61.349(a)(2)(i)(C) of this subpart.

(H) Each occurrence when the carbon in a carbon adsorber system that is regenerated directly on site in the control device is not regenerated at the predetermined carbon bed regeneration time.

(I) Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in Sec. 61.354(c) of this subpart.

(J) Each 3-hour period of operation during which the parameters monitored are outside the range of values specified in Sec. 61.349(a)(2)(iv)(C), or any other periods specified by the Administrator for a control device subject to the requirements of Sec. 61.349(a)(2)(iv).

(v) For a cover and closed-vent system monitored in accordance with Sec. 61.354(g), the owner or operator shall submit a report quarterly to the Administrator that identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure.

(8) Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit annually to the Administrator a report that summarizes all inspections required by Secs. 61.342 through 61.354 during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzone emissions is identified, including information about the repairs or corrective action taken.

27.d 40 CFR, Section 61.357 Reporting Requirements (continued)

(e) An owner or operator electing to comply with the provisions of Secs. 61.351 or 61.352 of this subpart shall notify the Administrator of the alternative standard selected in the report required under Sec. 61.07 or Sec. 61.10 of this part.

(f) An owner or operator who elects to install and operate the control equipment in Sec. 61.351 of this subpart shall comply with the reporting requirements in 40 CFR 60.115b.

(g) An owner or operator who elects to install and operate the control equipment in Sec. 61.352 of this subpart shall submit initial and quarterly reports that identify all seal gap measurements, as required in 40 CFR 60.693-2(a), that are outside the prescribed limits.

28. Air emission standards for equipment leaks, tanks, surface impoundments, and containers are subject to 40 CFR, Part 264, Subparts BB and CC.

B. State Only Enforceable Section

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

P001 - Sandblast cabinet located at Ross Transportation Services (RTS)
T032 - 14,000-gallon storage tank
T033 - 14,000-gallon storage tank
T034 - 14,000-gallon storage tank
T038 - 617,000-gallon maintenance storage tank
T041 - 5,000-gallon caustic storage tank
T042 - 5,000-gallon caustic storage tank
Z003 - Repacking operations
Z004 - Tanker sampling operations
Z005 - Parts Washer located at RTS
Z006 - 10,000-gallon diesel fuel tank
Z007 - Fingerprint Laboratory
Z008 - Container storage Area
Z009 - Sample Trailer
Z011 - Cooling Tower
Z012 - Surface water impoundment
Z013 - Part Washer located at Weld Shop
Z014 - Deisel Air Compressor located at surface water impoundment

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a Permit to install for the emissions unit.

2. The permittee is hereby notified that this permit and all Agency records covering the operation of this permitted source are subject to public disclosure in accordance with OAC rule 3745-49-03.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadway Dust (F001)

Activity Description: Fugitive dust from roadways

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Unpaved roadways and parking areas.	OAC rule 3745-17-08 (B)	Requirements do not apply, per OAC 3745-17-08(A)(1)
	OAC rule 3745-17-07(B)	Requirements do not apply, per OAC 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions

None

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 Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Thermal Oxidizer (N001)

Activity Description: Thermal Oxidizer # 7 = incinerator (main combustion chamber). Incineration system consists of rotary kiln, main combustion chamber, air pollution control equipment, closed loop scrubber water system, and ash management system

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
N001 - Hazardous Waste Incinerator (Thermal Oxidizer # 7, rotary kiln and main combustion chamber) rated at 24,000 pounds per hour feed, and equipped with a quench chamber, cyclone separator, radial-flow venturi scrubber, a packed bed scrubber, two wet electrostatic precipitators, and an ash management system	OAC rule 3745-31-05(A)(3) PTI 02-10853	Particulate emissions from the stack shall not exceed: 0.047 grain per dry standard cubic foot at seven percent oxygen; 11.5 pounds per hour; and 50.37 tons per year. Nitrogen oxides emissions shall not exceed: 158.1 pounds per hour on a rolling 24-hour average basis; and 196.2 tons per year (see Section A.I.2.e). Sulfur dioxide emissions shall not exceed: 15.1 pounds per hour; and 66.14 tons per year. Carbon monoxide emissions shall not exceed: 41 pounds per hour; and 179.6 tons per year. Hydrocarbon emissions shall not exceed: 5.15 pounds per hour; and 22.56 tons per year. Lead emissions shall not exceed: 11.5 pound per hour; 0.76 ton per quarter; and 3.0 tons per year Hydrochloric acid and chlorine gas emissions, expressed as hydrochloric acid equivalents, shall not exceed: 32.89 pounds per hour; and 144.07 tons per year. Mercury emissions shall not exceed: 1.85 pounds per hour on a rolling 24-hour average basis; and 1.13 tons per year.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		Beryllium emissions shall not exceed 0.004 ton per year. Dioxin and furan emissions shall not exceed: 2 ng TEQ/dscm, at seven percent oxygen; and 2.3 x 10-6 ton per year. TEQ is the toxicity equivalence, the international method of relating the toxicity of various dioxin/furan cogeners to the toxicity of 2,3,7,8 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). See Section A.I.2.d.
	OAC rule 3745-31-05(D)	Nitrogen oxides emissions shall not exceed 196.2 tons per rolling 365-day period (and see Section A.I.2.e).
	OAC rule 3745-17-07(A)	Visible emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-09	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	The requirements of this rule do not apply, in accordance with OAC rule 3745-17-08(A)(1).
	OAC rule 3745-17-07(B)	The requirements of this rule do not apply, in accordance with OAC rule 3745-17-07(A)(3)(h).

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	40 CFR Part 63, Subpart EEE (interim MACT standards for hazardous waste combustors, compliance must be demonstrated by 9/30/03)	Dioxins and furans emissions shall not exceed: 0.40 ng TEQ/dscm, corrected to 7 % oxygen; 1.049 x 10 -7 lb/hr; and 4.6 x 10 -7 ton/yr (see Section A.II.32). Mercury emissions shall not exceed: 130 ug/dscm, corrected to 7% oxygen; 0.034 lb/hr; and 0.149 ton/yr Lead and cadmium emissions, combined, shall not exceed: 240 ug/dscm, corrected to 7% oxygen; 0.063 lb/hr; and 0.276 ton/yr. Arsenic, beryllium, and chromium emissions, combined, shall not exceed: 97 ug/dscm, corrected to 7% oxygen; 0.025 lb/hr; and 0.110 ton/yr. CO emissions shall not exceed: 100 ppm by volume, over an hourly rolling average, on a dry basis, corrected to 7% oxygen; 32.76 lbs/hr; and 143.5 tons/yr. Hydrocarbon emissions shall not exceed: 10 ppm by volume during the DRE test run or equivalent, over an hourly rolling average, on a dry basis, corrected to 7% oxygen, reported as propane; 5.15 lbs/hr; and 22.56 tons/yr. Hydrochloric acid and chlorine gas emissions, combined and expressed as hydrochloric acid equivalents, shall not exceed: 77 ppm by volume, on a dry basis, corrected to 7% oxygen; 32.89 lbs/hr; and 144.07 tons/yr. Particulate emissions shall not exceed: 34 mg/dscm, corrected to 7% oxygen; 0.015 grain/dscf, corrected to 7% oxygen; 8.91 lbs/hr; and 39.03 tons/yr.
	40 CFR Part 61, Subpart E (NESHAP for Mercury)	The emission limitation specified by this rule is less stringent that the emission limitation for mercury, established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR 63, Subpart EEE.
	40 CFR Part 61, Subpart C (NESHAP for beryllium)	Beryllium emissions shall not exceed 10 grams per 24 hour period.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	40 CFR Part 61, Subpart FF (NESHAP for benzene waste operations)	See Sections A.I.2.f and A.III.56.

2. Additional Terms and Conditions

2.a 40 CFR 63, Subpart EEE: Emission Standards and Operating Limits

63.1203: What are the standards for hazardous waste incinerators?

(a) Emission limits for existing sources You must not discharge or cause combustion gasses to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or

(ii) Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400 degrees F or lower based on the average of the test run average temperatures; (For purposes of compliance, operation of a wet particulate control device is presumed to meet the 400 degrees F or lower requirement.)

(2) Mercury in excess of 130 micrograms/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 240 micrograms/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 97 micrograms/dscm, combined emissions, corrected to 7 percent oxygen;

(5) For carbon monoxide and hydrocarbons, either:

(i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(ii) of this section, you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by Sec. 63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

2. Additional Terms and Conditions (continued)

2.b 63.1203: continued

(a)(5)(ii) Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane;

(6) Hydrochloric acid and chlorine gas in excess of 77 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.

(b) Emission limits for new sources. You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) Dioxins and furans in excess of 0.20 ng TEQ/dscm, corrected to 7 percent oxygen;

(2) Mercury in excess of 45 micrograms/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 120 micrograms/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 97 micrograms/dscm, combined emissions, corrected to 7 percent oxygen;

(5) For carbon monoxide and hydrocarbons, either:

(i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (b)(5)(ii) of this section, you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by 63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

2. Additional Terms and Conditions (continued)

2.c 63.1203: continued

(b)(5)(ii) Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane;

(6) Hydrochloric acid and chlorine gas in excess of 21 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.

(c) Destruction and removal efficiency (DRE) standard. (1) 99.99% DRE. Except as provided in paragraph (c)(2) of this section, you must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. You must calculate DRE for each POHC from the following equation:

DRE = [1-(Wout/Win)] x 100%

Where:

Win = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feedstream; and

Wout = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere

(2) 99.9999% DRE. If you burn the dioxin-listed hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27 (see 261.31 of this chapter), you must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principle organic hazardous constituent (POHC) that you designate under paragraph (c)(3) of this section. You must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetro-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. You must use the equation in paragraph (c)(1) of this section calculate DRE for each POHC. In addition, you must notify the Administrator of your intent to incinerate hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27.

2.d 63.1203: continued

(c)(3) Principal organic hazardous constituents (POHCs).

(i) You must treat the Principal Organic Hazardous Constituents (POHCs) in the waste feed that you specify under paragraph (c)(3)(ii) of this section to the extent required by paragraphs (c)(1) and (c)(2) of this section.

(ii) You must specify one or more POHCs from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by Sec. 63.60, for each waste to be burned. You must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses or other data and information.

(d) Significant figures. The emission limits provided by paragraphs (a) and (b) of this section are presented with two significant figures. Although you must perform intermediate calculations using at least three significant figures, you may round the resultant emission levels to two significant figures to document compliance.

2. Additional Terms and Conditions (continued)

2.e The emissions of nitrogen oxides from this emissions unit shall not exceed 196.2 tons, based upon a cumulative, 365-day summation of the nitrogen oxides emissions.

To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, the emissions from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month nitrogen oxides emissions.

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for nitrogen oxides shall be based upon a cumulative rolling, 365-day summation of the nitrogen oxides emissions.

2.f The permittee shall monitor and maintain the total annual benzene quantity from facility waste to less than 10 megagrams per year. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before entering the incinerator. If it is determined that the benzene quantity has exceeded or will exceed 10 megagrams per year, the permitee shall demonstrate compliance with 61.342(b) and 61.342(c) of the NESHAP.

II. Operational Restrictions

1. 40 CFR 63, Subpart EEE: Monitoring and Compliance Provisions

63.1206: When and how must you comply with the standards and operating requirements?

(a) Compliance dates

(1) Compliance date for existing sources. You must comply with the standards of this subpart no later than September 30, 2003 unless the Administrator grants you an extension of time under Sec. 63.6(i) or Sec. 63.1213.

(2) New or reconstructed sources.

(i) If you commenced construction or reconstruction of your hazardous waste combustor after April 19, 1996, you must comply with this subpart by the later of September 30, 1999 or the date the source starts operations, except as provided by paragraph (a)(2)(ii) of this section. The costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart, between April 19, 1996 and a source's compliance date, are not considered to be reconstruction costs.

(ii) For a standard in this subpart that is more stringent than the standard proposed on April 19, 1996, you may achieve compliance no later than September 30, 2002 if you comply with the standard proposed on April 19, 1996 after September 30, 1999. This exception does not apply, however, to new or reconstructed area source hazardous waste combustors that become major sources after September 30, 1999. As provided by 63.6(b)(7), such sources must comply with this subpart at startup.

(3) Early compliance. If you choose to comply with the emissions standards of this subpart prior to September 30, 2002, your compliance date is the date you postmark the Notification of Compliance under Sec. 63.1207(j)(1).

II. Operational Restrictions (continued)

2. 63.1206: continued

(b) Compliance with standards

(1) Applicability. The emission standards and operating requirements set forth in this subpart apply at all times except:

(i) During periods of startup, shutdown, and malfunction; and

(ii) When hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cutoff for a period of time not less than the hazardous waste residence time), and you have documented in the operating record that you are complying with all otherwise applicable requirements and standards promulgated under authority of sections 112 (e.g., subpart LLL of this part for cement kilns) or 129 of the Clean Air Act in lieu of the emission standards of Secs. 63.1203 through 63.1205; the monitoring and compliance standards of this section and Secs. 63.1207 through 63.1209, except the modes of operation requirements of Sec 63.1209 (q); and the notification, reporting, and recordkeeping requirements of Secs 63.1210 through 63.1212.

3. 63.1206: continued

(b)(2) Methods for determining compliance. The Administrator will determine compliance with the emission standards of this subpart as provided by 63.6(f)(2). Conducting performance testing under operating conditions representative of the extreme range of normal conditions is consistent with the requirements of 63.6(f)(2)(iii)(B) and 63.7(e)(1) to conduct performance testing under representative operating conditions.

(3) Finding of compliance. The Administrator will make a finding concerning compliance with the emission standards and other requirements of this subpart as provided by 63.6(f)(3).

(4) Extension of compliance with emission standards. The Administrator may grant an extension of compliance with the emission standards of this subpart as provided by 63.6(i) and 63.1213.

(5) Changes in design, operation, or maintenance.

(i) Changes that may adversely affect compliance. If you plan to change (as defined in paragraph (b)(5)(iii) of this section) the design, operation, or maintenance practices of the source in a manner that may adversely affect compliance with any emission standard that is not monitored with a CEMS:

(A) Notification. You must notify the Administrator at least 60 days prior to the change, unless you document circumstances that dictate that such prior notice is not reasonably feasible. The notification must include:

(1) A description of the changes and which emission standards may be affected; and

(2) A comprehensive performance test schedule and test plan under the requirements of 63.1207(f) that will document compliance with the affected emission standard(s);

II. Operational Restrictions (continued)

4. 63.1206: continued

(b)(5)(i)(B) Performance test. You must conduct a comprehensive performance test under the requirements of 63.1207(f)(1) and (g)(1) to document compliance with the affected emission standard(s) and establish operating parameter limits as required under 63.1209, and submit to the Administrator a Notification of Compliance under 63.1207(j) and 63.1210(d); and

(C) Restriction on waste burning.

(1) Except as provided by paragraph (b)(5)(i)(C)(2) of this section, after the change and prior to submitting the notification of compliance, you must not burn hazardous waste for more than a total of 720 hours (renewable at the discretion of the Administrator) and only for the purposes of pretesting or comprehensive performance testing. Pretesting is defined at 63.1207(h)(2)(i) and (ii).

(2) You may petition the Administrator to obtain written approval to burn hazardous waste in the interim prior to submitting a Notification of Compliance for purposes other than testing or pretesting. You must specify operating requirements, including limits on operating parameters, that you determine will ensure compliance with the emission standards of this subpart based on available information. The Administrator will review, modify as necessary, and approve if warranted the interim operating requirements.

(ii) Changes that will not affect compliance. If you determine that a change will not adversely affect compliance with the emission standards or operating requirements, you must document the change in the operating record upon making such change. You must revise as necessary the performance test plan, Documentation of Compliance, Notification of Compliance, and start-up, shutdown, and malfunction plan to reflect these changes.

5. 63.1206: continued

(b)(5)(iii) Definition of "change." For purposes of paragraph (b)(5) of this section,"change" means any change in design, operation, or maintenance practices that were documented in the comprehensive performance test plan, Notification of Compliance, or startup, shutdown, and malfunction plan.

(6) Compliance with the carbon monoxide and hydrocarbon emission standards. This paragraph applies to sources that elect to comply with the carbon monoxide and hydrocarbon emissions standards under 63.1203 through 63.1205 by documenting continuous compliance with the carbon monoxide standard using a continuous emissions monitoring system and documenting compliance with the hydrocarbon standard during the destruction and removal efficiency (DRE) performance test or its equivalent.

(i) If a DRE test performed pursuant to Sec 63.1207(c)(2) is acceptable as documentation of compliance with the DRE standard, you may use the the highest hourly rolling average hydrocarbon level achieved during the DRE test runs to document compliance with the hydrocarbon standard. An acceptable DRE test is any test for which the data and results are determined to meet quality assurance objectives (on a site-specific basis) such that the results adequately demonstrate compliance with the DRE standard.

(ii) If during this acceptable DRE test you did not obtain hydrocarbon emissions data sufficient to document compliance with the hydrocarbon standard, you must either:

II. Operational Restrictions (continued)

6. 63.1206: continued

(b)(6)(ii)(A) Perform, as part of the performance test, an "equivalent DRE test" to document compliance with the hydrocarbon standard. An equivalent DRE test is comprised of a minimum of three runs each with a minimum duration of one hour during which you operate the combustor as close as reasonably possible to the operating parameter limits that you established based on the initial DRE test. You must use the highest hourly rolling average hydrocarbon emission level achieved during the equivalent DRE test to document compliance with the hydrocarbon standard; or (B) Perform a DRE test as part of the performance test.

(7) Compliance with the DRE standard.

(i) Except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section:

(A) You must document compliance with the Destruction and Removal Efficiency (DRE) standard under 63.1203 through 63.1205 only once provided that you do not modify the source after the DRE test in a manner that could affect the ability of the source to achieve the DRE standard;

(B) You may use any DRE test data that documents that your source achieves the required level of DRE provided:

(1) You have not modified the design or operation of your source in a manner that could effect the ability of your source to achieve the DRE standard since the DRE test was performed; and

(2) The DRE test data meet quality assurance objectives determined on a site-specific basis.

(ii) Sources that feed hazardous waste at a location in the combustion system other than the normal flame zone must demonstrate compliance with the DRE standard during each comprehensive performance test;

(iii) For sources that do not use DRE previous testing to document conformance with the DRE standard pursuant to Sec. 63.1207(c)(2), you must perform DRE testing during the initial comprehensive performance test.

7. 63.1206: continued

(8) Applicability of particulate matter and opacity standards during particulate matter CEMS correlation test.

(i) Any particulate matter and opacity standards of parts 60, 61, 63, 264, 265, and 266 of this chapter (i.e., any title 40 particulate or opacity standards) applicable to a hazardous waste combustor do not apply while you conduct particulate matter continuous emissions monitoring system (CEMS) correlation tests (i.e., correlation with manual stack methods) under the conditions of paragraphs (b)(8)(iii) through (vii) of this section.

(ii) Any permit or other emissions or operating parameter limits or conditions, including any limitation on workplace practices, that are applicable to hazardous waste combustors to ensure compliance with any particulate matter and opacity standards of parts 60, 61, 63, 264, 265, and 266 of this chapter (i.e., any title 40 particulate or opacity standards) do not apply while you conduct particulate matter CEMS correlation tests under the conditions of paragraphs (b)(8)(iii) through (vii) of this section.

II. Operational Restrictions (continued)

8. 63.1206: continued

(b)(8)(iii) For the provisions of this section to apply, you must:

(A) Develop a particulate matter CEMS correlation test plan that includes the following information. This test plan may be included as part of the comprehensive performance test plan required under 63.1207(e) and (f):

(1) Number of test conditions and number of runs for each test condition;

(2) Target particulate matter emission level for each test condition;

(3) How you plan to modify operations to attain the desired particulate matter emission levels; and

(4) Anticipated normal particulate matter emission levels; and

(B) Submit the test plan to the Administrator for approval at least 90 calendar days before the correlation test is scheduled to be conducted.

(iv) The Administrator will review and approve/disapprove the correlation test plan under the procedures for review and approval of the site-specific test plan provided by 63.7(c)(3)(i) and (iii). If the Administrator fails to approve or disapprove the correlation test plan within the time period specified by 63.7(c)(3)(i), the plan is considered approved, unless the Administrator has requested additional information.

(v) The particulate matter and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for a correlation test, including all runs of all test conditions, unless more time is approved by the Administrator.

(vi) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after you modify operations to attain the desired particulate matter emissions concentrations, unless you document in the correlation test plan that a longer period of conditioning is appropriate.

(vii) You must return to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

9. 63.1206: continued

(b)(9) This paragraph of the regulation is not applicable to this permittee.

(10) This paragraph of the regulation is not applicable to this permittee.

(11) Calculation of hazardous waste residence time. You must calculate the hazardous waste residence time and include the calculation in the performance test plan under 63.1207(f) and the operating record. You must also provide the hazardous waste residence time in the Documentation of Compliance under 63.1211(c) and the Notification of Compliance under 63.1207(j) and 63.1210(b).

(12) Documenting compliance with the standards based on performance testing.

(i) You must conduct a minimum of three runs of a performance test required under 63.1207 to document compliance with the emission standards of this subpart.

(ii) You must document compliance with the emission standards based on the arithmetic average of the emission results of each run, except that you must document compliance with the destruction and removal efficiency standard for each run of the comprehensive performance test individually.

(13) This paragraph of the regulation is not applicable to this permittee.

II. Operational Restrictions (continued)

10. 63.1206: continued

(b)(14) Alternative to the particulate matter standard for incinerators.

(i) General. In lieu of complying with the applicable particulate matter Sec. 63.1203(a)(7) or (b)(7), existing and new incinerators may elect to instead comply with the alternative metal emission control requirements described in paragraph (b)(14)(ii) or (b)(14)(iii) of this section, respectively.

(ii) Alternative metal emission control requirements for existing incinerators.

(A) You must not discharge or cause combustion gases to be emitted into the atmosphere that contain lead, cadmium, and selenium in excess of 240 ug/dscm, combined emissions, corrected to 7 percent oxygen; and,

(B) You must not discharge or cause combustion gases to be emitted into the atmosphere that contain arsenic, beryllium, chromium, antimony, cobalt, manganese, and nickel in excess of 97 ug/dscm, combined emissions, corrected to 7% oxygen; and,

(C) You must comply with the provisions specified in paragraph (b)(14)(iv) of this section.

(iii) Alternative metal emission control requirements for new incinerators.

(A) You must not discharge or cause combustion gases to be emitted into the atmosphere that contain lead, cadmium, and selenium in excess of 24 ug/dscm, combined emissions, corrected to 7 percent oxygen; and,

(B) You must not discharge or cause combustion gases to be emitted into the atmosphere that contain arsenic, beryllium, chromium, antimony, cobalt, manganese, and nickel in excess of 97 ug/dscm, combined emissions, corrected to 7 percent oxygen; and

(C) You must comply with the provisions specified in paragraph (b)(14)(iv) of this section.

(iv) Other requirements. Existing and new incinerators must document in the operating record that they meet the requirements of paragraph (b)(14)(iv)(A) through (C) of this section.

II. Operational Restrictions (continued)

11. 63.1206 continued

(b)(14)(iv)(A) The twelve-hour rolling average of the maximum theoretical emissions concentrationfor lead, cadmium, and selenium, combined, for the combined hazardous waste feedstreams to the incinerator, must not exceed:

(1) For existing incinerators, 1,325 ug/dscm

(2) For new incinerators, 875ug/dscm

(B) The twelve-hour rolling average of the maximum theoretical emissions concentration for arsenic, beryllium, chromium, antimony, cobalt, manganese, and nickel, combined, for the combined hazardous waste feedstreams to the incinerator, must not exceed:

(1) For existing incinerators, 6,000 ug/dscm

(2) For new incinerators, 3,250 ug/dscm

(C) You must document that your air pollution control system achieves at least 90 percent system removal efficiency for semivolatile metals. In making this demonstration, you may spike semivolatile metals above the applicable levels of paragraph (b)(14)(iv)(A) or (B) of this section provided that the applicable alternative emission limitation of paragraph (b)(14)(ii)(A) or (iii)(A) of this section is attained during the test. Thsi test may be performed independently of the comprehensive performance test and must be used to establish applicable operating parameter limits as described in Sec. 63.1209(n), not including Sec. 63.1209(n)(2), to ensure that a 90 percent semivolatile metal system removal efficiency is achieved during normal operations.

(v) Operating Limits.

(A) Semivolatile and low volatile metal operating parameter limits must be established to ensure compliance with the alternative emission limtations described in paragraphs (b)(14)(ii) and (iii) of this section pursuant to Sec. 63.1209(n), except that semi-volatile metal feedrate limits would apply to lead, cadmium, and selenium, combined, and low volatile metal feedrate limits would apply to arsenic, beryllium, chromium, antimony, cobalt, manganese, and nickel, combined.

12. 63.1206: continued

(b)(14)(v)(B) Twelve-hour rolling average hazardous wastemetal feedrate limits required pursuant to paragraphs (b)(14)(iv)(A) and (B) of this section are based on the combined hazardous waste feedstreams to the incinerator and may be expressed either as a maximum theoretical emission concentration limit or as a restriction on maximum hazardous waste metals mass feedrate and minimum gas flow rate.

(C) For purposes of complying with the twelve-hour rolling average hazardous waste metal feedrate limits of paragraphs (b)(14)(iv)(A) and (B) of this section, non-detectable metal constituents in each hazardous waste feed must be assumed to be present at one-half the detection limit.

(15) This paragraph of the regulation is not applicable to this permittee.

(c) Operating requirements

(1) General

(i) You must operate only under the operating requirements specified in the Documentationof Compliance under Sec. 63.1211(c) or the Notification of Compliance under Secs 63.1207(j) and 63.1210(b), except:

II. Operational Restrictions (continued)

13. 63.1206: continued

(c)(1)(i)(A) During performance tests under approved test plans according to Sec. 63.1207(e), (f), and (g); and,

(B) Under the conditions of paragraph (b)(1)(i) or (ii) of this section.

(ii) The Documentation of Compliance and the Notification of Compliance must contain operating requirements including, but not limited to, the operating requirements in this section and Sec. 63.1209

(iii) Failure to comply with the operating requirements is failure to ensure compliance with the emission standards of this subpart.

(iv) Operating requirements in the Notification of Compliance are applicable requirements for purposes of parts 70 and 71 of this chapter.

(v) The operating requirements specified in the Notification of Compliance will be incorporated in the title V permit.

(2) Startup, shutdown, and malfunction plan.

(i) You are subject to the startup, shutdown, and malfunction plan requirements of Sec. 63.6(e)(3).

(ii) If you elect to comply with Secs. 270.235(a)(1)(iii), 270.235(a)(2)(iii), or 270.235(b)(1)(ii) of this chapter to address RCRA concerns that you minimize emissions of toxic compounds from startup, shutdown, and malfunction events (including releases from emergency safety vents):

14. 63.1206: continued

(c)(2)(ii)(A) The startup, shutdown, and malfunction plan must include a description of potential causes of malfunctions, including releases from emergency safety vents, that may result in significant releases of hazardous air pollutants, and actions the source is taking to minimize the frequency and severity of those malfunctions.

(B) You must submit the startup, shutdown, and malfunction plan to the Administrator for review and approval.

(1) Approval procedure. The Administrator will notify you of approval or intention to deny approval of the startup, shutdown, and malfunction plan within 90 calendar days after receipt of the original request and within 60 calendar days after receipt of any supplemental information that you submit. Before disapproving the plan, the Administrator will notify you of the Administrator's intention to disapprove the plan together with:

(i) Notice of the information and findings on which intended disapproval is based; and

(ii) Notice of opportunity for you to present additional information to the Administrator before final action on disapproval of the plan. At the time the Administrator notifies you of intention to disapprove the plan, the Administrator will specify how much time you will have after being notified on the intended disapproval to submit additional information.

(2) Responsibility of owners and operators. You are responsible for ensuring that you submit any supplementary and additional information supporting your plan in a timely manner to enable the Administrator to consider whether to approve the plan. Neither your submittal of the plan, nor the Administrator's failure to approve or disapprove the plan, relieves you of the responsibility to comply with the provisions of this subpart.

(C) Changes to the plan that may significantly increase emissions.

II. Operational Restrictions (continued)

15. 63.1206: continued

(c)(2)(ii)(C)(1) You must request approval from the Administrator within 5 days after making a change to the startup, shutdown, and malfunction plan that may significantly increase emissions of hazardous air pollutants.

(2) To request approval of such changes to the startup, shutdown, and malfunctionplan, you must follow the procedures provided by paragraph (c)(2)(ii)(B) of this section for initial approval of the plan.

(iii) You must identify in the plan a projected oxygen correction factor based on normal operations to use during periods of startup and shutdown.

(iv) You must record the plan in the operating record.

(v) Operating under the startup, shutdown, and malfunction plan

(A) Compliance with AWFCO requirements during malfunctions.

(1) During malfunctions, the automatic waste feed cutoff requirements of Sec. 63.1206(c)(3) continue to apply, except for paragraph (c)(3)(v) and (c)(3)(vi) of this section. If you exceed a part 63, subpart EEE, of this chapter emission standard monitored by a CEMS or COMs or operating limit specified under Sec. 62.1209, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of this section. If the malfunction itself prevents immediate and automatic cutoff of the hazardous waste feed, however, you must cease feeding hazardous waste as quickly as possible.

(2) Although the automatic waste feed cutoff requirements continue to apply a malfunction, an exceedance of an emission standard monitored by a CEMS or COMS or operating limit specified under Sec. 63.1209 is not a violation of this subpart if you take the corrective measures prescribed in the startup, shutdown, and malfunction plan.

16. 63.1206: continued

(c)(2)(v)(A)(3) Excessive exceedances during malfunctions. For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, you must:

(i) Within 45 days of the 10th exceedance, complete an investigation of the cause of each exceedance and evaluation of approaches to minimize the frequency, duration, and severity of each exceedance, and revise the startup, shutdown, and malfunction plan as warranted by the evaluation to minimize the frequency, duration, and severity of each exceedance; and,

(ii) Record the results of the investigation and evaluation in the operating record, and include a summary of the investigation and evaluation, and any changes to the startup, shutdown, and malfunction plan, inthe excess emissions report required under Sec. 63.10(e)(3).

(B) Compliance with AWFCO requirements when burning hazardous waste during startup and shutdown.

(1) If you feed hazardous waste during startup or shutdown, you must include waste feed restrictions (e.g., type and quantity), and other appropriate operating conditions and limits in the startup, shutdown, and malfunction plan.

(2) You must interlock the operating limits you establish under paragraph (c)(2)(v)(B)(1) of this section with the automatic waste feed cutoff system required under Sec. 63.1206(c)(3), except for paragraphs (c)(3)(v) and (c)(3)(vi) of this section.

(3) When feeding hazardous waste during startup or shutdown, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed if you exceed the operating limits you establish under paragraph (c)(2)(v)(B)(1) of this section, except as provided by paragraph (c)(3)(viii) of this section.

II. Operational Restrictions (continued)

17. 63.1206 continued

(c)(2)(v)(B)(4) Although the automatic waste feed cutoff requirements of this paragraph apply during startup and shutdown, an exceedance of an emission standard or operating limit is not a violation of subpart if you comply with the operating procedures prescribed in the startup, shutdown, and malfunction plan.

(3) Automatic waste feed cutoff (AWFCO).

(i) General. Upon the compliance date, you must operate the hazardous waste combustor with a functioning system that immediately and automatically cuts off the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of this section:

(A) When any of the following are exceeded: Operating parameter limits specified under Sec. 63.1209; an emission standard monitored by a CEMS; and the allowable combustion chamber pressure;

(B) When the span value of any CMS detector, except a CEMS, is met or exceeded;

(C) Upon malfunctin of a CMS monitoring an operating parameter limit specified under Sec. 63.1209 or an emission level; or

(D) When any component of the automatic waste feed cutoff system fails.

18. 63.1206: continued

(c)(3)(ii) Ducting of combustion gases. During an AWFCO, you must continue to duct combustion gasses to the air pollution control system while hazardous waste remains in the combustion chamber (i.e., if the hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated).

(iii) Restarting waste feed. You must continue to monitor during the cutoff the operating parameters for which limits are established under 63.1209 and the emissions required under that section to be monitored by a CEMS, and you must not restart the hazardous waste feed until the operating parameters and emission levels are within the specified limits.

(iv) Failure of the AWFCO system. If the AWFCO system fails to automatically and immediately cutoff the flow of hazardous waste upon exceedance of parameter required to be interlocked with the AWFCO system under paragraph (c)(3)(i) of this section, you have failed to comply with the AWFCO requirements of paragraph (c)(3) of this section.

II. Operational Restrictions (continued)

19. 63.1206: continued

(c)(3)(v) Corrective measures. If, after any AWFCO, there is an exceedance of an emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber (i.e., whether the hazardous waste residence time has transpired since the hazardous waste feed cutoff system was activated), you must investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs, and record the findings and corrective measures in the operating record.

(vi) Excessive exceedance reporting.

(A) For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, you must submit to the Administrator a written report within 5 calendar days of the 10th exceedance documenting the exceedances and results of the investigation and corrective measures taken.

(B) On a case-by-case basis, the Administrator may require excessive exceedance reporting when fewer than 10 exceedances occur during a 60-day block period.

(vii) Testing. The AWFCO system and associated alarms must be tested at least weekly to verify operability, unless you document in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, you must conduct operability testing at least monthly. You must document and record in the operating record AWFCO operability test procedures and results.

20. 63.1206: continued

(c)(3)(viii) Ramping down waste feed.

(A) You may ramp down the waste feedrate of pumpable hazardous waste over a period not to exceed one minute, except as provided by paragraph (c)(3)(viii)(B) of this section. If you elect to ramp down the waste feed, you must document ramp down procedures in the operating and maintenance plan. The procedures must specify that the ramp down begins immediately upon initiation of automatic waste feed cutoff and the procedures must prescribe a bona fide ramping down. If an emission standard or operating limit is exceeded during the ramp down, you have failed to comply with the emission standards or operating requirements of this subpart.

(B) If the automatic waste feed cutoff is triggered by an exceedance of any of the following operating limits, you may not ramp down the waste feed cutoff: Minimum combustion chamber temperature, maximum hazardous waste feedrate, or any hazardous waste firing system operating limits that may be established for your combustor.

(4) ESV openings

(i) Failure to meet standards. If an emergency safety vent (ESV) opens when hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not expired) during an event other than a malfunction as defined in the startup, shutdown, and malfunction plan such that combustion gases are not treated as during the most recent comprehensive performance test (e.g., if the combustion gas by-passes any emission control device that was operating during the performance test), you must document in the operating record whether you remain in compliance with the emission standards of this subpart considering emissions during the ESV opening.

II. Operational Restrictions (continued)

21. 63.1206: continued

(c)(4)(ii) ESV operating plan.

(A) You must develop an ESV operating plan, comply with the operating plan, and keep the plan in the operating record.

(B) The ESV operating plan must provide detailed procedures for rapidly stopping the waste feed, shutting down the combustor, and maintaining temperature and negative pressure in the combustion chamber during the hazardous waste residence time, if feasible. The plan must include calculations and information and data documenting the effectiveness of the plan's procedures for ensuring that combustion chamber temperature and negative pressure are maintained as is reasonably feasible.

(iii) Corrective measures. After any ESV opening that results in a failure to meet the emission standards as defined in paragraph (c)(4)(i) of this section, you must investigate the cause of the ESV opening, take appropriate corrective measures to minimize such future ESV openings, and record the findings and corrective measures in the operating record.

(iv) Reporting requirement. You must submit to the Administrator a written report within 5 days of an ESV opening that results in failure to meet the emission standards of this subpart (as defined in paragraph (c)(4)(i) of this section) documenting the result of the investigation and corrective measures taken.

(5) Combustion system leaks.

(i) Combustion system leaks of hazardous air pollutants must be controlled by:

(A) Keeping the combustion zone sealed to prevent combustion system leaks; or

(B) Maintaining the maximum combustion zone pressure lower than ambient pressure using an instantaneous monitor; or

(C) Upon prior written approval of the Administrator, an alternative means of control to provide control of combustion system leaks equivalent to maintenance of combustion zone pressure lower than ambient pressure; or

II. Operational Restrictions (continued)

22. 63.1206: continued

(c)(5)(i)(D) Upon prior written approval of the Administrator, other technique(s) which can be demonstrated to prevent fugitive emissions without use of instantaneous pressure limits; and

(ii) You must specify in the operating record the method used for control of combustion system leaks.

(6) Operator training and certification.

(i) You must establish training programs for all categories of personnel whose activities may reasonably be expected to directly affect emissions of hazardous air pollutants from the source. Such persons include, but are not limited to, chief facility operators, control room operators, continuous monitoring system operators, persons that sample and analyze feedstreams, persons that manage and charge feedstreams to the combustor, persons that operate emission control devices, and ash and waste handlers. Each training program shall be of a technical level commensurate with the person's job duties specified in the training manual. Each commensurate training program shall require an examination to be administered by the instructor at the end of the training course. Passing of this test shall be deemed the "certification" for personnel, except that for control room operators and shift supervisors, the training and certification program shall be as specified in paragraphs (c)(6)(iii) and (vi) of this section.

(ii) You must ensure that the source is operated and maintained at all times by persons who are trained and certified to perform these and any other duties that may affect emissions of hazardous air pollutants. A certified control room operator must be on duty at the site at all times the source is in operation.

(iii) Hazardous waste incinerator control room operators must:

(A) Be trained and certified under a site-specific, source-developed and implemented program that meets the requirements of paragraph (c)(6)(v) of this section; or

II. Operational Restrictions (continued)

23. 63.1206: continued

(c)(6)(iii)(B) Be trained under the requirements of, and certified under, the American Society of Mechanical Engineers Standard Number QHO-1-1994 and QHO-1a-1996 Addenda (incorporated by reference--see Sec. 63.14(e)). If you choose to use the ASME program:

(1) Control room operators must, prior to the compliance date, achieve provisional certification, and must submit an application to ASME and be scheduled for the full certification exam. Within one year of the compliancedate, control room operators must achieve full certification;

(2) New operators and operators of new sources must, before assuming their duties, achieve provisional certification, and must submit an application to ASME, and be scheduled for the full certification exam. Within one year of assuming their duties, these operators must achieve full certification; or

(C) Be trained and certified under a State program.

(iv) This paragraph of the regulation is not applicable to this permittee.

(v) Site-specific, source developed and implemented training programs for control room operators must include the following elements:

(A) Training on the following subjects:

(1) Environmental concerns, including types of emissions;

(2) Basic combustion principles, including products of combustion;

(3) Operation of the specific type of combustor used by the operator, including proper startup, waste firing, and shutdown procedures;

(4) Combustion controls and continuous monitoring systems;

(5) Operation of air pollution control equipment and factors affecting performance;

(6) Inspection and maintenance of the combustor, continuous monitoring systems, and air pollution control devices;

(7) Actions to correct malfunctions or conditions that may lead to malfunction;

(8) Residue characteristics and handling procedures; and

(9) Applicable Federal, state, and local regulations, including Occupational Safety and Health Administration workplace standards and

II. Operational Restrictions (continued)

24. 63.1206 continued:

(c)(6)(v)(B) An examination designed and administered by the instructor; and

(C) Written material covering the training course topics that may serve as reference material following completion of the course.

(vi) To maintain control room operator qualification under a site-specific, source developed and implemented training program as provided by paragraph (c)(6)(v) of this section, control room operators must complete an annual review or refresher course covering, at a minimum, the following topics:

(A) Update of regulations;

(B) Combustor operation, including startup and shutdown procedures, waste firing, and residue handling;

(C) Inspection and maintenance;

(D) Responses to malfunctions or conditions that may lead to malfunction; and

(E) Operating problems encountered by the operator.

(vii) You must record the operator training and certification program in the operating record.

(7) Operation and maintenance plan

(i) General.

(A) You must prepare and at all times operate according to an operation and maintenance plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustor, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.

(B) The plan must prescribe how you will operate and maintain the combustor in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels achieved during the comprehensive performance test.

(C) This plan ensures compliance with the operation and maintenance requirements of 63.6(e) and minimizes emissions of pollutants, automatic waste feed cutoffs, and malfunctions.

(D) You must record the plan in the operating record.

II. Operational Restrictions (continued)

25. 63.1206: continued

(c)(7)(ii) Bag leak detection system requirements for baghouses at lightweight aggregate kilns and incinerators. If you own or operate a hazardous waste incinerator or hazardous waste burning lightweight aggregate kiln equipped with a baghouse (fabric filter), you must continuously operate a bag leak detection system that meets the specifications and requirements of paragraph (c)(7)(ii)(A) of this section and you must comply with the corrective measures requirements of paragraph (c)(7)(ii)(B) of this section:

(A) Bag leak detection system specification and requirements.

(1) The bag leak detection system must be certified by the manufacturer to be capable of continuously detecting and recording particulate matter emissions at concentrations of 1.0 milligrams per actual cubic meter unless you demonstrate, pursuant to procedures in Sec. 63.1209(a)(1), that a higher sensitivity would adequately detect bag leaks;

(2) The bag leak detection system shall provide output of relative particulate matter loadings;

(3) The bag leak detection system shall be equipped with an alarm system that will sound an audible alarm when an increase in relative particulate loadings is detected over a preset level;

(4) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the US EPA or, inthe absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system;

(5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time;

(6) Following initial adjustment, you must not adjust the sensitivty or range, averaging period, alarm set points, or alarm delay time, except as detailed in the operation and maintenance plan

II. Operational Restrictions (continued)

26. 63.1206: continued:

(c)(7)(ii)(A)(6) Following initial adjustment, you must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the operation and maintenance plan required under paragraph (c)(7)(i) of this section. You must not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition;

(7) For negative pressure or induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector shall be installed downstream of the baghouse and upstream of any wet acid gas scrubber; and

(8) Where multiple detectors are required, the system's instrumentation and alarm system may be shared among the detectors.

(B) Bag leak detection system corrective measures requirements. The operating and maintenance plan required by paragraph (c)(7)(i) of this section must include a corrective measures plan that specifies the proceures you will follow in the case of a bag leak detection system alarm. The corrective measures plan must include, at a minimum, the procedures used to determine and record the time and cause of the alarm as well as the corrective measures taken to correct the control device malfunction or minimize emissions as specified below. Failure to initiatethe corrective measures required by this paragraph is failure to ensure compliance with the emission standards in this subpart.

(1) You must initiate the procedures used to determine the cause of the alarm within 30 minutes of the time the alarm first sounds; and

(2) You must alleviate the cause of the alarm by taking the necessary corrective measure(s) which may include, but are not to be limited to, the following measures:

27. 63.1206: continued

(c)(7)(ii)(B)(2)(i) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media, or otherwise repairing the control device;

(iv) Sealing off a defective baghouse compartment;

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; or

(vi) Shutting down the combustor.

28. Except as provided in Section A.II.37 of this permit, the maximum hourly waste feed rate for this emissions unit shall not exceed 24,000 pounds per hour. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall comply with the feed rate limit on an hourly rolling average basis.

29. The incinerator, including all associated equipment and grounds, shall be designed, operated and maintained to prevent the emissions of objectionable odors.

30. The permittee shall operate and maintain a slag and bottom ash collection system that will eliminate fugitive dust emissions. Trucks hauling slag and bottom ash shall be covered prior to leaving the plant property.

II. Operational Restrictions (continued)

31. The main combustion chamber temperature shall be maintained at a temperature in excess of the minimum temperature which has been demonstrated to be necessary to destroy 99.99% of each POHC at all times while waste is being fed to the incinerator. Until a performance test is conducted that demonstrates compliance and a lower minimum temperature is established, this gas temperature shall be maintained at a minimum of 1900 degrees Fahrenheit at all times, except during periods of start up and shutdown. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, this condition shall be established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206 (Compliance with Standards and Operating Requirements), 63.1207 (Performance Testing Requirements), 63.1209 (Monitoring Requirements), 63.1210 (Notification Requirements), and 63.1211 (Record keeping and Reporting Requirements).

32. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the facility shall demonstrate compliance with the dioxin and furan emissions limit of 0.40 ng TEQ/dscm, corrected to 7 % oxygen.

33. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the minimum hourly rolling average pH of the gas-liquid contactor (packed bed scrubber) shall be established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

34. Start up of the incinerator shall begin with the heating of the cold combustion zone with natural gas, propane, distillate fuel oil, or waste materials which have been classified as hazardous solely due to their ignitability. Alternate fuels may not be used unless approved by the Ohio EPA.

35. The permittee shall comply with the operating requirements found in Section 63.1206 of the hazardous waste combustor MACT, 40 CFR Part 63 Subpart EEE, by the compliance dates of the interim and final (when promulgated) MACT Rules.

36. The permittee shall comply with all State and federal laws and regulations including, but not limited to, the Toxic Substances Control Act of 1979. No polychlorinated biphenyls (PCBs) in excess of 50 ppm shall be incinerated.

37. In preparation for a RCRA trial burn or the comprehensive performance test required by 40 CFR Part 63, Subpart EEE, the total feed rate to the incinerator may exceed 24,000 pounds per hour. This preparation period shall not exceed 720 hours, and during this period, the maximum hourly waste feed rate shall not exceed 26,400 pounds per hour.

38. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish and comply with one of the following parameters for the radial-flow venturi scrubber, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211:

a. a limit on the minimum liquid to gas ratio, on an hourly rolling average; or

b. the minimum scrubber water flow rate and maximum flue gas flow rate, on an hourly rolling average.

39. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish a limit on the minimum pressure drop across the radial-flow venturi scrubber on an hourly rolling average, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

40. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish a minimum liquid feed pressure to the packed bed scrubber based on the manufacturer's specifications. The permittee shall comply with this limit on an hourly rolling average basis, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

41. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish a minimum pressure drop across the packed bed scrubber based on the manufacturer's specifications. The permittee shall comply with this limit on an hourly rolling average basis and in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

II. Operational Restrictions (continued)

42. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish and comply with one of the following parameters for the wet scrubbers, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211:

a. a limit for the solids content of the scrubber liquid in both the radial-flow venturi and packed bed scrubber, measured using a continuous monitoring system (CMS) or by manual sampling and analysis:

i. for maximum solids content monitored with a CMS, the limit shall be establishes as a 12-hour rolling average; and

ii. for maximum solids content measured manually, the solids content shall be measured at least once per hour, unless an alternative monitoring frequency is approved by the regulating agency; or

b. a minimum blowdown rate, using a CMS, and either a minimum scrubber tank volume or liquid level, using a CMS, both established on an hourly rolling average.

43. The permittee shall operate and maintain the radial flow venturi scrubber, the packed bed scrubber, and the wet electrostatic precipitator (wet-ESP) in accordance with the following conditions, as required per the facility RCRA Federal Operating Permit:

a. the radial flow venturi water flow rate shall be continuously maintained at a value of not less than 800 gallons per minute (gpm), on an hourly rolling average;

b. the packed bed scrubber water flow rate shall be continuously maintained at a value of not less than 2,200 gpm, on an hourly rolling average;

c. the minimum pressure drop across the radial flow venturi scrubber shall be maintained at a value greater than 10" water column, on an hourly rolling average;

d. the pH of the scrubber liquor used in the gas-liquid contactor drain (to the packed bed scrubber), shall be maintained at or above 6.0, on an hourly rolling average; and

e. the total power to the wet electrostatic precipitator shall be maintained at a minimum of 2500 volt-amperes (VA), on an hourly average.

44. As an indicator of gas residence time in the incinerator and control devices, and following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish and comply with a limit on the maximum flue gas flow rate, the maximum production/process rate, or other proposed parameter, approved by the Ohio EPA, as an appropriate surrogate for the gas residence time. The permittee shall comply with this limit on an hourly rolling average basis, and in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

45. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish 12-hour rolling average feed rate limits for the following, as established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211:

a. the average mercury content of the waste fed to the kiln and the main combustion chamber;

b. the average chlorine content of the waste fed to the kiln and the main combustion chamber;

c. the average lead and cadmium content, combined, of the waste fed to the kiln and the main combustion chamber; and

d. the average arsenic, beryllium, and chromium content, combined, of the waste fed to the kiln and the main combustion chamber.

46. The permittee shall maintain the control equipment, associated with this emissions unit, in accordance with the manufacturers' operating manuals, with any adjustments or modifications deemed necessary by the permittee, and as required by the standards promulgated in 40 CFR 63, Subpart EEE.

II. Operational Restrictions (continued)

47. The permittee shall minimize or eliminate visible fugitive particulate emissions from the kiln and main combustion chamber by maintaining the maximum combustion zone pressure lower than ambient pressure, by means of an induced draft fan. The kiln and main combustion chamber draft (vacuum) shall be maintained at at least 0.05 inches of water column during all periods of operation. The draft transmitter shall scan the draft reading once each second of operating time and shall record the draft reading once every ten seconds.

48. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall operate the hazardous waste combustor with a functioning automatic waste feed cutoff (AWFCO) system that immediately and automatically cuts off the hazardous waste feed to the kiln and which shall be activated and operated as required in Section 63.1206(c)(3) of the rule. The AWFCO and associated alarms must be tested at least weekly to verify operability, unless the permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate; in which case, the permittee shall conduct operability testing at least monthly.

49. By the compliance date of the interim standards for 40 CFR 63 Subpart EEE, the permittee shall develop a Documentation of Compliance (DOC), that shall identify the applicable emission standards and the limits on the operating parameters, established under Section 63.1209, that will ensure compliance with the standards. And following the initial comprehensive performance test and each subsequent comprehensive and confirmatory performance test, the permittee shall establish and document the hourly rolling average of each of these parameters including, but not limited to (as per the final rule), the following parameters:

- maximum waste feedrate,
- minimum combustion chamber temperature,
- minimum scrubber pH in the gas-liquid contactor;
- minimum pressure drop across the radial-flow venturi and packed bed scrubbers;
- maximum flue gas flow rate,
- minimum scrubber water flow rate in the radial-flow venturi and packed bed scrubbers, and
- minimum liquid to gas ratio in the radial-flow venturi scrubber, and/or - minimum liquid feed pressure to the packed bed scrubber.

These parameters shall also be established as required by 40 CFR 63.1209, during the most recent compliance demonstration, and reported in the Notification of Compliance (NOC).

50. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance with the hourly rolling average limits for the above parameters (hazardous waste feedrate, combustion chamber temperature, gas-liquid contactor pH, pressure drop across the radial-flow venturi and packed bed scrubbers, flue gas flow rate, scrubber water flow rate in the radial-flow venturi and packed bed scrubbers, liquid to gas ratio in the radial-flow venturi scrubber, and/or the liquid feed pressure to the packed bed scrubber) shall be demonstrated by each continuous monitoring system. The hourly rolling average shall be calculated as required in 40 CFR 63.1209 (a)(6) and (b)(5) of the interim rule, and as required in the final rule when promulgated; each minute of operation would constitute a new hourly rolling average.

51. The permittee shall operate the WESP controller in a manner that maximizes the particulate removal performance of the unit. This shall include but not be limited to setting the controller to automatically maximize effective secondary voltage, while considering the manufacturer's recommended maximum spark rate. The permittee shall not arbitrarily or artificially lower the WESP controller set points, except for the purposes of particulate removal performances testing or to optimize particulate removal performance by minimizing sparking.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR 63, Subpart EEE: Monitoring and Compliance Provisions

63.1209: What are the monitoring requirements?

(a) Continuous emissions monitoring systems (CEMS) and continuous opacity monitoring systems (COMS).

(1)(i) You must use either a carbon monoxide or hydrocarbon CEMS to demonstrate and monitor compliance with the carbon monoxide and hydrocarbon standard under this subpart. You must also use an oxygen CEMS to continuously correct the carbon monoxide or hydrocarbon level to 7 percent oxygen.

(ii) This paragraph of the regulations is not applicable to this permittee.

(iii) You must install, calibrate, maintain, and operate a particulate matter CEMS to demonstrate and monitor compliance with the particulate matter standards under this subpart. However, compliance with the requirements in this section to install, calibrate, maintain, and operate the PM CEMS is not required until such time that the Agency promulgates all performances specifications and operational requirements applicable to PM CEMS.

(iv) This paragraph of the regulation is not applicable to this permittee.

(v) This paragraph of the regulation is not applicable to this permittee.

(2) Performance specifications. You must install, calibrate, maintain, and continuously operate the CEMS and COMS in compliance with the quality assurance procedures provided in the appendix to this subpart and Performance Specifications 1 (opacity), 4B (carbon monoxide and oxygen), and 8A (hydrocarbons) in appendix B, part 60 of this chapter.

2. 63.1209: continued

(a)(3) Carbon monoxide readings exceeding the span.

(i) Except as provided by paragraph (a)(3)(ii) of this section, if a carbon monoxide CEMS detects a response that results in a one-minute average at or above the 3,000 ppmv span level required by Performance Specification 4B in appendix B, part 60 of this chapter, the one-minute average must be recorded as 10,000 ppmv. The one-minute 10,000 ppmv value must be used for calculating the hourly rolling average carbon monoxide level.

(ii) Carbon monoxide CEMS that use a span value of 10,000 ppmv when one-minute carbon monoxide levels are equal to or exceed 3,000 ppmv are not subject to paragraph (a)(3)(i) of this section. Carbon monoxide CEMS that use a span value of 10,000 are subject to the same CEMS performance and equipment specifications when operating in the range of 3,000 ppmv to 10,000 ppmv that are provided by Performance Specification 4B for other carbon monoxide CEMS, except:

(A) Calibration drift must be less than 300 ppmv; and

(B) Calibration error must be less than 500 ppmv.

(4) Hydrocarbon readings exceeding the span.

(i) Except as provided by paragraph (a)(4)(ii) of this section, if a hydrocarbon CEMS detects a response that results in a one-minute average at or above the 100 ppmv span level required by Performance Specification 8A in appendix B, part 60 of this chapter, the one-minute average must be recorded as 500 ppmv. The one-minute 500 ppmv value must be used for calculating the hourly rolling average HC level.

III. Monitoring and/or Record Keeping Requirements (continued)

3. 63.1209: continued

(a)(4)(ii) Hydrocarbon CEMS that use a span value of 500 ppmv when one-minute hydrocarbon levels are equal to or exceed 100 ppmv are not subject to paragraph (a)(4)(i) of this section. Hydrocarbon CEMS that use a span value of 500 ppmv are subject to the same CEMS performance and equipment specifications when operating in the range of 100 ppmv to 500 ppmv that are provided by Performance Specification 8A for other hydrocarbon CEMS, except:

(A) The zero and high-level calibration gas must have a hydrocarbon level of between 0 and 100 ppmv, and between 250 and 450 ppmv, respectively;

(B) The strip chart recorder, computer, or digital recorder must be capable of recording all readings within the CEM measurement range and must have a resolution of 2.5 ppmv;

(C) The CEMS calibration must not differ by more than 15 ppmv after each 24-hour period of the seven day test at both zero and high levels;

(D) The calibration error must be no greater than 25 ppmv; and

(E) The zero level, mid-level, and high level calibration gas used to determine calibration error must have a hydrocarbon level of 0-200 ppmv, 150-200 ppmv, and 350-400 ppmv, respectively.

(5) Petitions to use CEMS for other standards. You may petition the Administrator to use CEMS for compliance monitoring for particulate matter, mercury, semivolatile metals, low volatile metals, and hydrochloric acid/chlorine gas under 63.8(f) in lieu of compliance with the corresponding operating parameter limits under this section.

4. 63.1209: continued

(a)(6) Calculation of rolling averages.

(i) Calculation of rolling averages initially. The carbon monoxide or hydrocarbon CEMS must begin recording one-minute average values by 12:01 a.m. and hourly rolling average values by 1:01 a.m., when 60 one-minute values will be available for calculating the initial hourly rolling average for those sources that come into compliance on the regulatory compliance date. Sources that elect to come into compliance before the regulatory compliance date must begin recording one-minute and hourly rolling average values within 60 seconds and 60 minutes (when 60 one-minute values will be available for calculating the initial hourly rolling average), respectively, from the time at which compliance begins.

(ii) Calculation of rolling averages upon intermittant operations. You must ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous 59 values to calculate the hourly rolling average.

(iii) Calculation of rolling averages when the hazardous waste feed is cutoff.

(A) Except as provided by paragraph (a)(6)(iii)(B) of this section, you must continue monitoring carbon monoxide and hydrocarbons when the hazardous waste feed is cutoff if the source is operating. You must not resume feeding hazardous waste if the emission levels exceed the standard.

(B) You are not subject to the CEMS requirements of this subpart during periods of time you meet the requirements of 63.1206(b)(1)(ii) (compliance with emissions standards for nonhazardous waste burning sources when you are not burning hazardous waste).

III. Monitoring and/or Record Keeping Requirements (continued)

5. 63.1209: continued

(7) Operating parameter limits for hydrocarbons. If you elect to comply with the carbon monoxide and hydrocarbon emission standard by continuously monitoring carbon monoxide with a CEMS, you must demonstrate that hydrocarbon emissions during the comprehensive performance test do not exceed the hydrocarbon emissions standard. In addition, the limits you establish on the destruction and removal efficiency (DRE) operating parameters required under paragraph (j) of this section also ensure that you maintain compliance with the hydrocarbon emission standard. If you do not conduct the hydrocarbon demonstration and DRE tests concurrently, you must establish separate operating parameter limits under paragraph (j) of this section based on each test and the more restrictive of the operating parameter limits applies.

(b) Other continuous monitoring systems (CMS).

(1) You must use CMS (e.g., thermocouples, pressure transducers, flow meters) to document compliance with the applicable operating parameter limits under this section.

(2) Except as specified in paragraphs (b)(2)(i) and (ii) of this section, you must install and operate continuous monitoring systems other than CEMS in conformance with 63.8(c)(3) that requires you, at a minimum, to comply with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system:

(i) Calibration of thermocouples and ptrometers. The calibration of thermocouples must be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year. You must operate and maintain optical pyrometers in accordance with manufacturer specifications unless otherwise approved by the Administrator. You must calibrate optical pyrometers in accordance with the frequency and procedures recommended by the manufacturer, but no less frequent than once per year, unless otherwise approved by the Administrator. And,

6. 63.1209: continued

(b)(1)(ii) Accuracy and calibration of weight measurement devices for activated carbon injection systems. If you operate a carbon injection system the accuracy of weight measurement device must be 1 percent of the weight being measured. The calibration of the device must be verified at least once every three months.

(3) CMS must sample the regulated parameter without interruption, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.

(4) The span of the non-CEMS CMS detector must not be exceeded. You must interlock the span limits into the automatic waste feed cutoff system required by 63.1206(c)(3).

(5) Calculation of rolling averages.

(i) Calculation of rolling averages initially. Continuous monitoring systems must begin recording one-minute average values by 12:01 a.m., hourly rolling average values by 1:01 a.m.(e.g., when 60 one-minute values will be available for calculating the initial hourly rolling average), and twelve-hour rolling averages by 12:01 p.m.(e.g., when 720 one-minute averages are available to calculate a 12-hour rolling average), for those sources that come into compliance on the regulatory compliance date. Sources that elect to come into compliance before the regulatory compliance date must begin recording one-minute, hourly rolling average, and 12-hour rolling average values within 60 seconds, 60 minutes (when 60 one-minute values will be available for calculating the initial hourly rolling average), and 720 minutes (when 720 one-minute values will be available for calculating the initial 12-hour hourly rolling average) respectively, from the time at which compliance begins.

III. Monitoring and/or Record Keeping Requirements (continued)

7. 63.1209: continued

(b)(5)(ii) Calculation of rolling averages upon intermittent operations. You must ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages.

(iii) Calculation of rolling averages when the hazardous waste feed is cutoff.

(A) Except as provided by paragraph (b)(5)(iii)(B) of this section, you must continue to monitoring operating parameter limits with a CMS when the hazardous waste feed is cutoff if the source is operating. You must not resume feeding hazardous waste if an operating parameter exceeds its limit.

(B) You are not subject to the CMS requirements of this subpart during periods of time you meet the requirements of 63.1206(b)(1)(ii) (compliance with emissions standards for nonhazardous waste burning sources when you are not burning hazardous waste).

(c) Analysis of feedstreams.

(1) General. Prior to feeding the material, you must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits provided by this section.

(2) Feedstream analysis plan. You must develop and implement a feedstream analysis plan and record it in the operating record. The plan must specify at a minimum:

(i) The parameters for which you will analyze each feedstream to ensure compliance with the operating parameter limits of this section;

(ii) Whether you will obtain the analysis by performing sampling and analysis or by other methods, such as using analytical information obtained from others or using other published or documented data or information;

8. 63.1209: continued

(c)(2)(iii) How you will use the analysis to document compliance with applicable feedrate limits (e.g., if you blend hazardous wastes and obtain analyses of the wastes prior to blending but not of the blended, as-fired, waste, the plan must describe how you will determine the pertinent parameters of the blended waste);

(iv) The test methods which you will use to obtain the analyses;

(v) The sampling method which you will use to obtain a representative sample of each feedstream to be analyzed using sampling methods described in appendix I, part 26, of this chapter, or an equivalent method; and

(vi) The frequency with which you will review or repeat the initial analysis of the feedstream to ensure that the analysis is accurate and up to date.

(3) Review and approval of analysis plan. You must submit the feedstream analysis plan to the Administrator for review and approval, if requested.

(4) Compliance with feedrate limits. To comply with the applicable feedrate limits of this section, you must monitor and record feedrates as follows:

(i) Determine and record the value of the parameter for each feedstream by sampling and analysis or other method;

(ii) Determine and record the mass or volume flowrate of each feedstream by a CMS. If you determine flowrate of a feedstream by volume, you must determine and record the density of the feedstream by sampling and analysis (unless you report the constituent concentration in units of weight per unit volume (e.g., mg/l)); and

(iii) Calculate and record the mass feedrate of the parameter per unit time.

III. Monitoring and/or Record Keeping Requirements (continued)

9. 63.1209: continued

(c)(5) Waiver of monitoring of constituents in certain feedstreams. You are not required to monitor levels of metals or chlorine in the following feedstreams to document compliance with the feedrate limits under this section provided that you document in the comprehensive performance test plan the expected levels of the constituent in the feedstream and account for those assumed feedrate levels in documenting compliance with feedrate limits: natural gas, process air, and feedstreams from vapor recovery systems.

(d) Performance evaluations.

(1) The requirements of Sec. 63.8(d) (Quality control program) and (e) (Performance evaluation of continuous monitoring systems) apply, except that you must conduct performance evaluations of components of the CMS under the frequency and procedures (for example, submittal of performance evaluation test plan for review and approval) applicable to performance tests as provided by 63.1207.

(2) You must comply with the quality assurance procedures for CEMS prescribed in the appendix to this subpart.

(e) Conduct of monitoring. The provisions of 63.8(b) apply.

(f) Operation and maintenance of continuous monitoring systems. The provisions of 63.8(c) apply except:

(1) Section 63.8(c)(3). The requirements of Sec. 63.1211(c), that requires CMSs to be installed, calibrated, and operational on the compliance date, shall be complied with instead of section 63.8(c)(3);

(2) Section 63.8(c)(4)(ii). The performance specifications for carbon monoxide, hydrocarbon, and oxygen CEMSs in subpart B, part 60 of this chapter that requires detectors to measure the sample concentration at least once every 15 seconds for calculating an average emission rate once every 60 seconds shall be complied with instead of section 63.8(c)(4)(ii); and

III. Monitoring and/or Record Keeping Requirements (continued)

10. 63.1209: continued

(f)(3)This paragraph of the regulation is not applicable to this permittee.

(g) Alternative monitoring requirements other than continuous emissions monitoring systems (CEMS)

(1) Requests to use alternative methods.

(i) You may submit an application to the Administrator under this paragraph for approval of alternative monitoring requirements to document compliance with the emission standards of this subpart. For requests to use additional CEMS, however, you must use paragraph (a)(5) of this section and 63.8(f).

(A) The Administrator will not approve averaging periods for operating parameter limits longer than specified in this section unless you document using data or information that the longer averaging period will ensure that emissions do not exceed levels achieved during the comprehensive performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.

(B) If the Administrator approves the application to use an alternative monitoring requirement, you must continue to use that alternative monitoring requirement until you receive approval under this paragraph to use another monitoring requirement.

(ii) You may submit an application to waive an operating parameter limit specified in this section based on documentation that neither that operating parameter limit nor an alternative operating parameter limit is needed to ensure compliance with the emission standards of this subpart.

(iii) You must comply with the following procedures for applications submitted under paragraphs (g)(1)(i) and (ii) of this section:

(A) Timing of the application. You must submit the application to the Administrator not later than with the comprehensive performance test plan.

(B) Content of the application. You must include in the application:

11. 63.1209: continued

(g)(1)(iii)(B)(1) Data or information justifying your request for an alternative monitoring requirement (or for a waiver of an operating parameter limit), such as the technical or economic infeasibility or the impracticality of using the required approach;

(2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach/technique (e.g., type of detector, monitoring location), the averaging period for the limit, and how the limit is to be calculated; and

(3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard, or that it is the monitoring requirement that best assures compliance with the standard and that is technically and economically practicable.

(C) Approval of request to use an alternative monitoring requirement or waive an operating parameter limit. The Administrator will notify you of approval or intention to deny approval of the request within 90 calendar days after receipt of the original request and within 60 calendar days after receipt of any supplementary information that you submit. The Administrator will not approve an alternative monitoring request unless the alternative monitoring requirement provides equivalent or better assurance of compliance with the relevant emission standard, or is the monitoring requirement that best assures compliance with the standard and that is technically and economically practicable. Before disapproving any request, the Administrator will notify you of the Administrator's intention to disapprove the request together with:

(1) Notice of the information and findings on which the intended disapproval is based; and

III. Monitoring and/or Record Keeping Requirements (continued)

12. 63.1209: continued

(g)(1)(iii)(C)(2) Notice of opportunity for you to present additional information to the Administrator before final action on the request. At the time the Administrator notifies you of intention to disapprove the request, the Administrator will specify how much time you will have after being notified of the intended disapproval to submit the additional information.

(D) Responsibility of owners and operators. You are responsible for ensuring that you submit any supplementary and additional information supporting your application in a timely manner to enable the Administrator to consider your application during review of the comprehensive performance test plan. Neither your submittal of an application, nor the Administrator's failure to approve or disapprove the application, relieves you of the responsibility to comply with the provisions of this subpart.

(2) Administrator's discretion to specify additional or alternative requirements. The Administrator may determine on a case-by-case basis at any time (e.g., during review of the comprehensive performance test plan, during compliance certification review) that you may need to limit additional or alternative operating parameters (e.g., opacity in addition to or in lieu of operating parameter limits on the particulate matter control device) or that alternative approaches to establish limits on operating parameters may be necessary to document compliance with the emission standards of this subpart.

(h) Reduction of monitoring data. The provisions of 63.8(g) apply.

13. 63.1209: continued

(i) When an operating parameter is applicable to multiple standards. Paragraphs (j) through (p) of this section require you to establish limits on operating parameters based on comprehensive performance testing to ensure you maintain compliance with the emission standards of this subpart. For several parameters, you must establish a limit for the parameter to ensure compliance with more than one emission standard. An example is a limit on minimum combustion chamber temperature to ensure compliance with both the DRE standard of paragraph (j) of this section and the dioxin/furan standard of paragraph (k) of this section. If the performance tests for such standards are not performed simultaneously, the most stringent limit for a parameter derived from independent performance tests applies.

(j) DRE. To remain in compliance with the destruction and removal efficiency (DRE) standard, you must establish operating limits during the comprehensive performance test (or during a previous DRE test under provisions of Sec. 63.1206(b)(7)) for the following parameters, unless the limits are based on manufacturer specifications, and comply with those limits at all times that hazardous waste remains in the combustion chamber (i.e., the hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated):

(1) Minimum combustion chamber temperature.

(i) You must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. You must document the temperature measurement location in the test plan you submit under Sec. 63.1207(e);

(ii) You must establish a minimum hourly rolling average limit as the average of the test run averages;

III. Monitoring and/or Record Keeping Requirements (continued)

14. 63.1209: continued

(j)(2) Maximum flue gas flowrate or production rate.

(i) As an indicator of gas residence time in the control device, you must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that you document in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.

(ii) You must comply with this limit on a hourly rolling average basis;

(3) Maximum hazardous waste feedrate.

(i) You must establish limits on the maximum pumpable and total (i.e., pumpable and nonpumpable) hazardous waste feedrate for each location where hazardous waste is fed.

(ii) You must establish the limits as the average of the maximum hourly rolling averages for each run.

(iii) You must comply with the feedrate limit(s) on a hourly rolling average basis;

(4) Operation of waste firing system. You must specify operating parameters and limits to ensure that good operation of each hazardous waste firing system is maintained.

(k) Dioxins and furans. You must comply with the dioxin and furans emission standard by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

(1) Gas temperature at the inlet to a dry particulate matter control device.

(i) For hazardous waste burning incinerators and cement kilns, if the combustor is equipped with an electrostatic precipitator, baghouse (fabric filter), or other dry emissions control device where particulate matter is suspended in contact with combustion gas, you must establish a limit on the maximum temperature of the gas at the inlet to the device on an hourly rolling average. You must establish the hourly rolling average limit as the average of the test run averages.

III. Monitoring and/or Record Keeping Requirements (continued)

15. 63.1209: continued

(k)(1)(ii) This paragraph of the regulation is not applicable to this permittee.

(2) Minimum combustion chamber temperature.

(i) You must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. You must document the temperature measurement location in the test plan you submit under Sec. 63.1207(e) and (f);

(ii) You must establish a minimum hourly rolling average limit as the average of the test run averages.

(3) Maximum flue gas flowrate or production rate.

(i) As an indicator of gas residence time in the control device, you must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that you document in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.

(ii) You must comply with this limit on a hourly rolling average basis;

(4) Maximum waste feedrate.

(i) You must establish limits on the maximum pumpable and total (pumpable and nonpumpable) waste feedrate for each location where waste is fed.

(ii) You must establish the limits as the average of the maximum hourly rolling averages for each run.

(iii) You must comply with the feedrate limit(s) on a hourly rolling average basis;

(5) Particulate matter operating limit. If your combustor is equipped with an activated carbon injection system, you must establish operating parameter limits on the particulate matter control device as specified by paragraph (m)(1) of this section;

(6) Activated carbon injection parameter limits. If your combustor is equipped with an activated carbon injection system:

III. Monitoring and/or Record Keeping Requirements (continued)

16. 63.1209: continued

(k)(6)(i) Carbon feedrate. You must establish a limit on minimum carbon injection rate on an hourly rolling average calculated as the average of the test run averages. If your carbon injection system injects carbon at more than one location, you must establish a carbon feedrate limit for each location.

(ii) Carrier fluid. You must establish a limit on minimum carrier fluid (gas or liquid) flowrate or pressure drop as an hourly rolling average based on the manufacturer's specifications. You must document the specifications in the test plan you submit under 63.1207(e) and (f);

(iii) Carbon specification.

(A) You must specify and use the brand (i.e., manufacturer) and type of carbon used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless you document in the site-specific performance test plan required under 63.1207(e) and (f) key parameters that affect adsorption and establish limits on those parameters based on the carbon used in the performance test.

(B) You may substitute at any time a different brand or type of carbon provided that the replacement has equivalent or improved properties compared to the carbon used in the performance test and conforms to the key sorbent parameters you identify under paragraph (k)(6)(iii)(A) of this section. You must include in the operating record documentation that the substitute carbon will provide the same level of control as the original carbon.

(7) Carbon bed parameter limits. If your combustor is equipped with a carbon bed system:

(i) Monitoring bed age: You must:

(A) Monitor performance of the carbon bed consistent with manufacturer's specifications and recommendations to ensure the carbon bed (or bed segment for sources with multiple segments) has not reached the end of its useful life to minimize dioxin/furan and mercury emissions at least to the levels required by the emission standards;

17. 63.1209: continued

(k)(7)(i)(B) Document the monitoring procedures in the operation and amintenance plan;

(C) Record results of the performance monitoring in the operating record; and

(D) Replace the bed or bed segment before it has reached the end of its useful life to minimize dioxin/furan and mercury emissions at least to the levels required by the emission standards.

(ii) Carbon specification.

(A) You must specify and use the brand (i.e., manufacturer) and type of carbon used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless you document in the site-specific performance test plan required under 63.1207(e) and (f) key parameters that affect adsorption and establish limits on those parameters based on the carbon used in the performance test.

(B) You may substitute at any time a different brand or type of carbon provided that the replacement has equivalent or improved properties compared to the carbon used in the performance test. You must include in the operating record documentation that the substitute carbon will provide an equivalent or improved level of control as the original carbon.

(iii) Maximum temperature. You must measure the temperature of the carbon bed at either the bed inlet or exit and you must establish a maximum temperature limit on an hourly rolling average as the average of the test run averages.

III. Monitoring and/or Record Keeping Requirements (continued)

18. 63.1209: continued

(k)(8) Catalytic oxidizer parameter limits. If your combustor is equipped with a catalytic oxidizer, you must establish limits on the following parameters:

(i) Minimum flue gas temperature at the entrance of the catalyst. You must establish a limit on minimum flue gas temperature at the entrance of the catalyst on an hourly rolling average as the average of the test run averages.

(ii) Maximum time in-use. You must replace a catalytic oxidizer with a new catalytic oxidizer when it has reached the maximum service time specified by the manufacturer.

(iii) Catalyst replacement specifications. When you replace a catalyst with a new one, the new catalyst must be equivalent to or better than the one used during the previous comprehensive test, as measured by:

(A) Catalytic metal loading for each metal;

(B) Space time, expressed in the units s-1, the maximum rated volumetric flow of combustion gas through the catalyst divided by the volume of the catalyst; and

(C) Substrate construction, including materials of construction, washcoat type, and pore density.

(iv) Maximum flue gas temperature. You must establish a maximum flue gas temperature limit at the entrance of the catalyst as an hourly rolling average, based on manufacturer's specifications.

(9) Inhibitor feedrate parameter limits. If you feed a dioxin/furan inhibitor into the combustion system, you must establish limits for the following parameters:

(i) Minimum inhibitor feedrate. You must establish a limit on minimum inhibitor feedrate on an hourly rolling average as the average of the test run averages.

19. 63.1209: continued

(k)(9)(ii) Inhibitor specifications.

(A) You must specify and use the brand (i.e., manufacturer) and type of inhibitor used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless you document in the site-specific performance test plan required under 63.1207(e) and (f) key parameters that affect the effectiveness of the inhibitor and establish limits on those parameters based on the inhibitor used in the performance test.

(B) You may substitute at any time a different brand or type of inhibitor provided that the replacement has equivalent or improved properties compared to the inhibitor used in the performance test and conforms to the key parameters you identify under paragraph (k)(9)(ii)(A) of this section. You must include in the operating record documentation that the substitute inhibitor will provide the same level of control as the original inhibitor.

(l) Mercury. You must comply with the mercury emission standard by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

(1) Feedrate of total mercury. You must establish a 12-hour rolling average limit for the total feedrate of mercury in all feedstreams as the average of the test run averages, unless mercury feedrate limits are extrapolated from performance test feedrate levels under the following provisions.

(i) You may request as part of the performance test plan under Sec. 63.7(b) and (c) and Sec. 63.1207(e) and (f) to use the mercury feedrates and associated emission rates during the comprehensive performance test to extrapolate to higher allowable feedrate limits and emission rates.

(ii) The extrapolation methodology will be reviewed and approved, as warranted, by the Administrator. The review will consider in particular whether:

III. Monitoring and/or Record Keeping Requirements (continued)

20. 63.1209: continued

(l)(1)(ii)(A) Performance test metal feedrates are appropriate (i.e., whether feedrates are at least at normal levels; depending on the heterogeneity of the waste, whether some level of spiking would be appropriate; and whether the physical form and species of spiked material is appropriate); and

(B) Whether the extrapolated feedrates you request are warranted considering historical metal feedrate data.

(iii) The Administrator will review the performance test results in making a finding of compliance required by Sec. 63.6(f)(3) and Sec. 63.1206(b)(3) to ensure that you have interpreted emission test results properly and that the extrapolation procedure is appropriate for your source.

(2) Wet scrubber. If your combustor is equipped with a wet scrubber, you must establish operating parameter limits prescribed by paragraph (o)(3) of this section, except for paragraph (o)(3)(iv).

(3) Activated carbon injection. If your combustor is equipped with an activated carbon injection system, you must establish operating parameter limits prescribed by paragraph (k)(5) and (k)(6) of this section.

(4) Activated carbon bed. If your combustor is equipped with an activated carbon bed system, you must comply with the requirements of (k)(7) of this section to assure compliance with the mercury emission standard.

(m) Particulate matter. You must comply with the particulate matter emission standard by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

(1) Control device operating parameter limits (OPLs).

III. Monitoring and/or Record Keeping Requirements (continued)

21. 63.1209: continued

(m)(1)(i) Wet scrubbers. For sources equipped with wet scrubbers, including ionizing wet scrubbers, high energy wet scrubbers such as venturi, hydrosonic, collision, or free jet wet scrubbers, and low energy wet scrubbers such as spray towers, packed beds, or tray towers, you must establish limits on the following parameters.

(A) For high energy scrubbers only, minimum pressure drop across the wet scrubber on an hourly rolling average, established as the average of the test run averages;

(B) For all wet scrubbers:

(1) To ensure that the solids content of the scrubber liquid does not exceed levels during the performance test, you must either:

(i) Establish a limit on solids content of the scrubber liquid using a CMS or by manual sampling and analysis. If you elect to monitor solids content manually, you must sample and analyze the scrubber liquid hourly unless you support an alternative monitoring frequency in the performance test plan that you submit for review and approval; or

(ii) Establish a minimum blowdown rate using a CMS and either a minimum scrubber tank volume or liquid level using a CMS.

(2) For maximum solids content monitored with a CMS, you must establish a limit on a 12-hour rolling average as the average of the test run averages.

(3) For maximum solids content measured manually, you must establish an hourly limit, as measured at least once per hour, unless you support an alternative monitoring frequency in the performance test plan that you submit for review and approval. You must establish the maximum hourly limit as the average of the manual measurement averages for each run.

(4) For minimum blowdown rate and either a minimum scrubber tank volume or liquid level using a CMS, you must establish a limit on an hourly rolling average as the average of the test run averages.

III. Monitoring and/or Record Keeping Requirements (continued)

22. 63.1209: continued

(m)(1)(i)(C) For high energy wet scrubbers only, you must establish limits on either the minimum liquid to gas ratio or the minimum scrubber water flowrate and maximum flue gas flowrate on an hourly rolling average. If you establish limits on maximum flue gas flowrate under this paragraph, you need not establish a limit on maximum flue gas flowrate under paragraph (m)(2) of this section. You must establish these hourly rolling average limits as the average of the test run averages; and

(ii) Reserved

(iii) Reserved

(iv) Other particulate matter control devices. For each control device that is not a high energy or ionizing wet scrubber, baghouse, or electrostatic precipitator but is operated to comply with the particulate matter emission standards of this subpart, you must ensure that the control device is properly operated and maintained as required by 63.1206(c)(7) and by monitoring the operation of the control device as follows:

(A) During each comprehensive performance test conducted to demonstrate compliance with the particulate matter emissions standard, you must establish a range of operating values for the control device that is a representative and reliable indicator that the control device is operating within the same range of conditions as during the performance test. You must establish this range of operating values as follows:

(1) You must select a set of operating parameters appropriate for the control device design that you determine to be a representative and reliable indicator of the control device performance.

(2) You must measure and record values for each of the selected operating parameters during each test run of the performance test. A value for each selected parameter must be recorded using a continuous monitor.

23. 63.1209: continued

(m)(1)(iv)(A)(3) For each selected operating parameter measured in accordance with the requirements of paragraph (m)(1)(iv)(A)(1) of this section, you must establish a minimum operating parameter limit or a maximum operating parameter limit, as appropriate for the parameter, to define the operating limits within which the control device can operate and still continuously achieve the same operating conditions as during the performance test.

(4) You must prepare written documentation to support the operating parameter limits established for the control device and you must include this documentation in the performance test plan that you submit for review and approval. This documentation must include a description for each selected parameter and the operating range and monitoring frequency required to ensure the control device is being properly operated and maintained.

(B) You must install, calibrate, operate, and maintain a monitoring device equipped with a recorder to measure the values for each operating parameter selected in accordance with the requirements of paragraph (m)(1)(iv)(A)(1) of this section. You must install, calibrate, and maintain the monitoring equipment in accordance with the equipment manufacturer's specifications. The recorder must record the detector responses at least every 60 seconds, as required in the definition of continuous monitor.

(C) You must regularly inspect the data recorded by the operating parameter monitoring system at a sufficient frequency to ensure the control device is operating properly. An excursion is determined to have occurred any time that the actual value of a selected operating parameter is less than the minimum operating limit (or, if applicable, greater than the maximum operating limit) established for the parameter in accordance with the requirements of paragraph (m)(1)(iv)(A)(3) of this section.

III. Monitoring and/or Record Keeping Requirements (continued)

24. 63.1209: continued

(m)(1)(iv)(D) Operating parameters selected in accordance with paragraph (m)(1)(iv) of this section may be based on manufacturer specifications provided you support the use of manufacturer specifications in the performance test plan that you submit for review and approval.

(2) Maximum flue gas flowrate or production rate.

(i) As an indicator of gas residence time in the control device, you must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that you document in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.

(ii) You must comply with this limit on a hourly rolling average basis;

(3) Maximum ash feedrate. Owners and operators of hazardous waste incinerators must establish a maximum ash feedrate limit as the average of the highest hourly rolling averages for each run.

(n) Semivolatile metals and low volatility metals. You must comply with the semivolatile metal (cadmium and lead) and low volatile metal (arsenic, beryllium, and chromium) emission standards by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

(1) Maximum inlet temperature to dry particulate matter air pollution control device. You must establish a limit on the maximum inlet temperature to the primary dry metals emissions control device (e.g., electrostatic precipitator, baghouse) on an hourly rolling average basis as the average of the test run averages.

(2) Maximum feedrate of semivolatile and low volatile metals.

(i) General. You must establish feedrate limits for semivolatile metals (cadmium and lead) and low volatile metals (arsenic, beryllium, and chromium) as follows, except as provided by paragraph (n)(2)(ii) of this section:

25. 63.1209: continued

(n)(2)(i)(A) You must establish a 12-hour rolling average limit for the feedrate of cadmium and lead, combined, in all feedstreams as the average of the test run averages;

(B) You must establish a 12-hour rolling average limit for the feedrate of arsenic, beryllium, and chromium, combined, in all feedstreams as the average of the test run averages; and

(C) You must establish a 12-hour rolling average limit for the feedrate of arsenic, beryllium, and chromium, combined, in all pumpable feedstreams as the average of the test run averages. Dual feedrate limits for both pumpable and total feedstreams are not required, however, if you base the total feedrate limit solely on the feedrate of pumpable feedstreams.

(ii) Feedrate extrapolation. (A) You may request as part of the performance test plan under 63.7(b) and (c) and 63.1207(e) and (f) to use the semivolatile metal and low volatile metal feedrates and associated emission rates during the comprehensive performance test to extrapolate to higher allowable feedrate limits and emission rates.

(B) The extrapolation methodology will be reviewed and approved, as warranted, by the Administrator. The review will consider in particular whether:

(1) Performance test metal feedrates are appropriate (i.e., whether feedrates are at least at normal levels; depending on the heterogeneity of the waste, whether some level of spiking would be appropriate; and whether the physical form and species of spiked material is appropriate); and

(2) Whether the extrapolated feedrates you request are warranted considering historical metal feedrate data.

III. Monitoring and/or Record Keeping Requirements (continued)

26. 63.1209: continued

(n)(2)(ii)(C) The Administrator will review the performance test results in making a finding of compliance required by Sec. 63.6(f)(3) and Sec. 63.1206(b)(3) to ensure that you have interpreted emission test results properly and that the extrapolation procedure is appropriate for your source.

(3) Control device operating parameter limits (OPLs). You must establish operating parameter limits on the particulate matter control device as specified by paragraph (m)(1) of this section;

(4) Maximum total chlorine and chloride feedrate. You must establish a 12-hour rolling average limit for the feedrate of total chlorine and chloride in all feedstreams as the average of the test run averages.

(5) Maximum flue gas flowrate or production rate.

(i) As an indicator of gas residence time in the control device, you must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that you document in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.

(ii) You must comply with this limit on a hourly rolling average basis.

(o) Hydrochloric acid and chlorine gas. You must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

(1) Feedrate of total chlorine and chloride. You must establish a 12-hour rolling average limit for the total feedrate of chlorine (organic and inorganic) in all feedstreams as the average of the test run averages.

(2) Maximum flue gas flowrate or production rate.

III. Monitoring and/or Record Keeping Requirements (continued)

27. 63.1209: continued

(o)(2)(i) As an indicator of gas residence time in the control device, you must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that you document in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.

(ii) You must comply with this limit on a hourly rolling average basis;

(3) Wet scrubber. If your combustor is equipped with a wet scrubber:

(i) If your source is equipped with a high energy wet scrubber such as a venturi, hydrosonic, collision, or free jet wet scrubber, you must establish a limit on minimum pressure drop across the wet scrubber on an hourly rolling average as the average of the test run averages;

(ii) If your source is equipped with a low energy wet scrubber such as a spray tower, packed bed, or tray tower, you must establish a minimum pressure drop across the wet scrubber based on manufacturer's specifications. You must comply with the limit on an hourly rolling average;

(iii) If your source is equipped with a low energy wet scrubber, you must establish a limit on minimum liquid feed pressure to the wet scrubber based on manufacturer's specifications. You must comply with the limit on an hourly rolling average;

(iv) You must establish a limit on minimum pH on an hourly rolling average as the average of the test run averages;

(v) You must establish limits on either the minimum liquid to gas ratio or the minimum scrubber water flowrate and maximum flue gas flowrate on an hourly rolling average as the average of the test run averages. If you establish limits on maximum flue gas flowrate under this paragraph, you need not establish a limit on maximum flue gas flowrate under paragraph (o)(2) of this section; and

(vi) You must establish a limit on minimum power input for ionizing wet scrubbers on an hourly rolling average as the average of the test run averages.

III. Monitoring and/or Record Keeping Requirements (continued)

28. 63.1209: continued

(o)(4) Dry scrubber. If your combustor is equipped with a dry scrubber, you must establish the following operating parameter limits:

(i) Minimum sorbent feedrate. You must establish a limit on minimum sorbent feedrate on an hourly rolling average as the average of the test run averages.

(ii) Minimum carrier fluid flowrate or nozzle pressure drop. You must establish a limit on minimum carrier fluid (gas or liquid) flowrate or nozzle pressure drop based on manufacturer's specifications.

(iii) Sorbent specifications.

(A) You must specify and use the brand (i.e., manufacturer) and type of sorbent used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless you document in the site-specific performance test plan required under Sec. 63.1207(e) and (f) key parameters that affect adsorption and establish limits on those parameters based on the sorbent used in the performance test.

(B) You may substitute at any time a different brand or type of sorbent provided that the replacement has equivalent or improved properties compared to the sorbent used in the performance test and conforms to the key sorbent parameters you identify under paragraph (o)(4)(iii)(A) of this section. You must record in the operating record documentation that the substitute sorbent will provide the same level of control as the original sorbent.

(p) Maximum combustion chamber pressure. If you comply with the requirements for combustion system leaks under Sec. 63.1206(c)(5) by maintaining the maximum combustion chamber zone pressure lower than ambient pressure, you must monitor the pressure instantaneously and the automatic waste feed cutoff system must be engaged when negative pressure is not maintained at any time.

29. 63.1209: continued

(q) Operating under different modes of operation. If you operate under different modes of operation, you must establish operating parameter limits for each mode. You must document in the operating record when you change a mode of operation and begin complying with the operating parameter limits for an alternative mode of operation.

(1) Operating under otherwise applicable standards after the hazardous waste residence time has transpired. As provided by Sec. 63.1206(b)(1)((ii), you may operate under otherwise applicable requirements promulgated under sections 112 and 129 of the Clean Air Act in lieu of the substantive requirements of this subpart.

(i) The otherwise applicable rquirements promulgated under sections 112 and 129 of the Clean Air Act are applicable requirements under this subpart.

(ii) You must specify (e.g., by reference) the otherwise applicable requiremens as a mode of operation in your Documentation of Compliance under Sec. 63.1211(c), your Notification of Compliance under Sec. 63.1207(j), and your title V permit application. These requirements include the otherwise applicable requirements governing emission standards, monitoring and compliance, and notification, reporting, and recordkeeping.

(2) Calculating rolling averages under different modes of operation. When you transition to a different mode of operation, you must calculate rolling averages as follows:

(i) Retrieval approach. Calculate rolling averages anew using the continuous monitoring system values previously recorded for that mode of operation (i.e., you ignore continuous monitoring system values subsequently recorded under other modes of operation when you transition back to a mode of operation); or

(ii) Start anew. Calculate rolling averages anew without considering previous recordings.

III. Monitoring and/or Record Keeping Requirements (continued)

30. 63.1209: continued

(A) Rolling averages must be calculated as the average of the available one-minute values for the parameter until enough one-minute values are available to calculate hourly or 12-hour rolling averages, whichever is applicable to the parameter.

(B) You may not transition to a new mode of operation using this approach if the most recent operation in that mode resulted in an exceedance of an applicable emission standard measured with a CEMS or operating parameter limit prior to the hazardous waste residence time expiring; or

(iii) Seamless transition. Continue calculating rolling averages using data from the previous operating mode provided that both the operating limit and the averaging period for the parameter are the same for both modes of operation.

31. 63.1211(a) See Reporting Requirements #4

63.1211(b) Summary of record keeping requirements. You must retain the following in the operating record:

Reference Document, data, or information

63.1201(a), 63.10(b), and (c).....General. Information required to document and maintaincompliance with the regulations of Subpart EEE, including data recorded by continuous monitoring systems (CMS), and copies of all notifications, reports, plans, and other documents submitted to the Administrator.

63.1206(b)(1)(ii).....If you elect to comply with all applicable requirements and standards promulgated under authority of the Clean Air Act, including Sections 112 and 129, in lieu of the requirements of Subpart EEE when not burning hazardous waste, you must document in the operating record that you are in compliance with those requirements.

63.1206(b)(5)(ii).....Documentation that a change will not adversely affect compliance with the emission standards or operating requirements.

63.1206(b)(11).....Calculation of hazardous waste residence time.

63.1206(c)(2).....Startup, shutdown, and malfunction plan.

63.1206(c)(2)(v)(A).....Documentation and results of the investigation and evaluation of excessive exceedance during malfunctions.

63.1206(c)(3)(v).....Corrective measures for any automatic waste feed cutoff that results in an exceedance of an emission standard or operating parameter limit.

63.1206(c)(3)(vii).....Documentation and results of the automatic waste fedd cutoff operability testing.

63.1206(c)(4)(ii).....Emergency safety vent operating plan.

63.1206(c)(4)(iii).....Corrective measures for any emergency safety vent opening.

63.1206(c)(5)(ii).....Method used for control of combustion system leaks.

63.1206(c)(6).....Operator training and certification program.

63.1206(c)(7)(i)(D).....Operation and maintenance plan.

63.1209(c)(2).....Feedstrem analysis plan.

III. Monitoring and/or Record Keeping Requirements (continued)

63.1209(k)(6)(iii), 63.1209(k)(7)(ii), 63.1209(k)(9)(ii), 63.1209(o)(4)(iii).....Documentation that a substitute activated carbon, dioxin/furan formation reaction inhibitor, or dry scrubber will provide the same level of control as the original material.

63.1209(k)(7)(i)(C).....Results of carbon bed performance monitoring.

63.1209(q).....Documentation of changes inmodes of operation.

63.1211(c).....Documentation of compliance.

32. CO monitoring system

a. A statement of certification of the existing continuous CO monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Proof of certification shall be made available to the Director (Ohio EPA Northeast District Office) upon request.

b. The permittee shall operate and maintain existing equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

c. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one-minute) basis, emissions of CO in units of the applicable standard in the appropriate averaging period (hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

d. In order to demonstrate compliance with the annual CO limit, the permittee shall add the hourly emissions, documented by the continuous CO monitoring system, at the end of each month.

33. NOx monitoring system

a. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Proof of certification shall be made available to the Director (Ohio EPA Northeast District Office) upon request.

b. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

c. The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

d. In order to demonstrate compliance with the rolling 365-day NOx limit, the permittee shall add the hourly (or 24-hour average times 24) emissions, documented by the continuous NOx monitoring system, to the previous rolling 364 day records, at the end of each day. During the first 12 calendar months following the issuance of this permit, the NOx emissions shall be maintained as a rolling 12-month record.

III. Monitoring and/or Record Keeping Requirements (continued)

34. Oxygen monitoring system

a. A statement of certification of the existing continuous oxygen 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 3. Proof of certification shall be made available to the Director (Ohio EPA Northeast District Office) upon request.

b. The permittee shall operate and maintain existing equipment to continuously monitor and record oxygen from this emissions unit in units of percent oxygen. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

c. The permittee shall maintain records of all data obtained by the continuous oxygen monitoring system including, but not limited to percent oxygen on an instantaneous (one-minute) basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

d. The permittee shall determine and record oxygen from this emissions unit in units of percent oxygen dry.

35. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the incinerator from a location that best represents the bulk gas temperature in the combustion zone. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information for each day:

a. all periods of time during which the temperature within the main combustion chamber, when the emissions unit was burning hazardous waste, was less than 1900 degrees Fahrenheit and/or less than the temperature demonstrated to be necessary to destroy 99.99% of each selected POHC; and

b. a log of all periods of time during which the temperature did not meet the requirements specified above.

36. The permittee shall comply with the monitoring and record keeping requirements found in Sections 63.1209 and 63.1211 of the hazardous waste combustor MACT, 40 CFR Part 63 Subpart EEE, by the compliance dates of the interim and final MACT Rules. By the compliance date of the interim standards for 40 CFR 63 Subpart EEE, the permittee shall have developed a Documentation of Compliance (DOC), that shall identify the limits on the operating parameters, established under Section 63.1209, that will ensure compliance with the standards. Following any compliance testing activities conducted to satisfy the requirements of the standard, and upon postmark of the Notification of Compliance (NOC) for each such demonstration, the operating parameter limits identified in the NOC shall replace those limits identified in the DOC or a previous NOC. Record keeping demonstrating compliance with each of the hourly rolling average limits for each of these parameters shall be maintained using the appropriate continuous monitoring systems and associated recording equipment.

37. The permittee shall properly install, operate, and maintain equipment to continuously monitor the water flow rate through the radial-flow venturi scrubber and the packed bed scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The permittee shall collect and record the scrubber water flow rate, in gallons per minute, on a continuous basis.

38. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pH of the scrubber liquor in the gas-liquid contactor (packed bed scrubber) while the emissions unit is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall demonstrate compliance with the established limit for the minimum pH of the scrubber liquor on an hourly rolling average, in accordance with 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211, from the most recent performance test that demonstrated compliance.

III. Monitoring and/or Record Keeping Requirements (continued)

39. The permittee shall maintain the following records for the wet electrostatic precipitator(s) (WESP) when the emissions unit is in operation:

a. The permittee shall monitor and record the following information on an hourly basis:

i. the average secondary voltage, in kilovolts, and the average secondary current in millamps, for each transformer rectifier (TR) set in the WESP(s);

ii. the average power input (in Volt-Amperes {VA}) of each TR set for each hour (calculated by multiplying the average secondary voltage {in kilovolts} by the average secondary current {in amps} for each TR set); and

iii. the average total power input to the WESP(s) for each hour (add together the average power inputs for the TR sets operating during the hour).

b. The permittee shall record the following information for each day of operation:

i. the average total combined power input to the wet-ESP(s) as 1 hour rolling averages when the emissions unit was in operation;

ii. the duration of any downtime for the WESP(s) monitoring equipment for secondary voltage and current, not maintained as specified above; each WESP section that is out of service; and the duration of the downtime for each section, when the associated emissions unit was in operation; and

iii. any 1-hour period of time in which the average total combined power input (in VA) to all fields of the WESP, was less than the operating limit specified in Section A.II.43.e.

The monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the parameters they were meant to record.

40. The permittee shall maintain daily records of the materials burned in the kiln and the main combustion chamber. At a minimum, the records shall contain:

a. the total hourly average waste feed rate to the kiln and the main combustion chamber;

b. the average hourly chlorine content of the waste fed to the system, calculated using the concentration of chlorine in each waste stream fed to the system (as indicated on the waste product survey and/or by analytical testing), and the average hourly waste feed rate for that stream; and

c. the average hourly lead content of the waste fed to the system, calculated using the concentration of lead in each waste stream fed to the system (as indicated on the waste product survey and/or by analytical testing), and the average hourly waste feed rate for that stream.

III. Monitoring and/or Record Keeping Requirements (continued)

41. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall maintain daily records of the materials burned in the kiln and main combustion chamber, and the 12-hour rolling average feed rate of the following pollutants. At a minimum, the records shall contain:

a. the total hourly average waste feed rate to the kiln and the main combustion chamber;

b. each 12-hour rolling average chlorine content of the waste fed to the kiln and the main combustion chamber;

c. each 12-hour rolling average lead and cadmium content, combined, of the waste fed to the kiln and the main combustion chamber;

d. each 12-hour rolling average arsenic, beryllium, and chromium content, combined, of the waste fed to the kiln and the main combustion chamber; and

e. each 12-hour rolling average mercury content of the waste fed to the kiln and the main combustion chamber.

These records may replace the record keeping requirements in Section A.III.40 above, as the BAT limit is replaced by this MACT. Compliance shall be demonstrated through analyses of the feed as required in the following section, Section A.III.42.

42. Unless a waiver pursuant to 40 CFR 63.1207(m) is obtained following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits for mercury, semivolatile metals, low volatile metals, total chlorine (organic and inorganic), and chloride. The permittee shall develop and implement a feedstream analysis plan. The plan, at a minimum, shall specify the following:

a. the parameters for which each feedsteam will be analyzed;

b. documentation as to whether the analysis for each waste stream shall be performed through sampling and analysis or from analytical information;

c. documentation as to how the analysis shall document compliance with the applicable feedrate limits;

d. the test methods used to obtain the analysis;

e. the sampling method used to obtain a representative sample of each feedstream analyzed;

f. the frequency with which the permittee shall review or repeat the analysis of the feedstream;

g. documentation of the mass or volume flowrate of each feedstream using a continuous monitoring system (CMS) (if the flowrate of the feedstream is determined by volume, the density of the feedsteam must also be determined and documented, unless the constituent concentration is in units of weight per unit volume); and

h. procedures for calculating and maintaining records of the mass feedrate of mercury, semivolatile metals, low volatile metals, total chlorine (organic and inorganic), and chloride, as the twelve-hour rolling average maximum theoretical emission concentration (MTEC).

The feedstream analysis plan shall be submitted to the Ohio EPA Northeast District Office upon request.

III. Monitoring and/or Record Keeping Requirements (continued)

43. The permittee shall develop a plan for the routine sampling and laboratory analysis of incoming wastes for the purpose of preventing polychlorinated biphenyls (PCBs), in excess of 50 ppm, from being incinerated in the kiln and the secondary combustion chamber. Such plan shall include as a minimum:

a. a copy of the standard supplier contract which prohibits the delivery of PCBs in excess of 50 ppm to the facility; and

b. a copy of written provision for PCB analysis from an Ohio EPA-approved laboratory.

All laboratory analyses shall be reported to the permittee directly from the laboratory and shall be retained on site and available for inspection by the Ohio EPA for a minimum of five (5) years.

44. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee must develop an Emergency Safety Vent (ESV) operating plan, comply with the plan, and keep the plan in the operating record. The permittee shall record the following information for each ESV opening that occurs while burning hazardous waste:

a. the date;

b. the time the bypass vent was opened and closed;

c. the amount of waste in the kiln and the main combustion chamber at the time the vent opened;

d. an estimate of air emissions, using the best available data, including emissions of particulate emissions, hydrocarbons, hydrogen chloride, sulfur dioxide, nitrogen oxides, carbon monoxide, beryllium, lead, mercury, benzene, and other hazardous air pollutants (HAPs); and

e. the cause(s) of the EVS opening.

45. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall maintain daily records of the following operating parameters, based on an hourly rolling average, unless otherwise specified:

a. the minimum temperature in the kiln and in main combustion chamber;

b. the minimum pH of the scrubber liquor in the gas-liquid contactor;

c. the minimum water flow rate and the maximum flue gas flowrate; or the minimum liquid to gas ratio in the radial-flow venturi scrubber and the packed bed scrubber;

d. the minimum liquid feed pressure to the packed bed scrubber;

e. the minimum pressure drop across the radial-flow venturi and packed bed scrubbers;

f. the maximum solids content* of the radial-flow venturi and packed bed scrubbers; or the minimum blowdown rate and either the minimum scrubber tank volume or liquid level;

g. the maximum flue gas flowrate or maximum process/production weight rate;

h. the maximum waste feed rate, not to exceed 24,000 pounds per hour; and

i. a log or record of the operating time for the control devices, monitoring equipment, and the incinerator itself (this may be maintained as one record for the entire system, if no part of the system was down or in malfunction while the incinerator was in operation).

* if the solids content is measured using a CMS, the record may be maintained as a 12-hour rolling average, rather than an hourly rolling average.

III. Monitoring and/or Record Keeping Requirements (continued)

46. The permittee shall maintain monthly records of the following information:

a. the nitrogen oxides emission rate for each month (tons);

b. the hours of operation for each month;

c. total tons of waste fed to the incinerator; and

d. during the first 12 calendar months of operation following the issuance of this permit, the summation of the cumulative rolling 12-month nitrogen oxides emissions (tons).

47. The following information shall be recorded electronically and made accessible via modem:

a. nitrogen oxides emissions (ppm and lbs/hr, as a one minute block average); and

b. CO emissions (raw ppm, ppm corrected to 7% oxygen on a dry basis, and pounds per hour, on a one minute and 60-minute rolling average).

48. The permittee shall record the date, time, duration, and reason for each waste feed cutoff actuated as a result of an excursion from the RCRA Part B Permit.

49. The permittee shall maintain daily records of the main combustion chamber and kiln draft (vacuum, expressed in inches of water column) through the proper operation and maintenance of a continuous pressure monitor and an alarm/waste cut-off system. The draft transmitter shall record the draft reading once every ten seconds. The permittee shall record each event where the kiln or main combustion draft pressure is less than 0.05 inches of water pressure for 30 seconds or longer in the kiln and/or for 15 seconds or longer for the main combustion chamber. The record shall include the date, time, length of each event, and if shut-down procedures were implemented. Following the compliance date of the interim and final standards for 40 CFR 63, Subpart EEE, records shall be maintained as required per the promulgated rule.

50. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall maintain records of any AWFCO event, as required in Section 63.1206(c)(3) of the rule. A record of the weekly AWFCO operability testing shall be maintained, and/or a record documenting that any weekly inspection will unduly restrict or upset operations, in which case, a monthly inspection shall be conducted and the event documented.

51. The permittee shall conduct Method 9 readings at least four days of each calendar week (Sunday through Saturday) and for at least 30 minutes on each of the four days. If a more stringent opacity standard is developed upon the promulgation of the final rules for 40 CFR 63, Subpart EEE, the permittee shall comply with the requirements of the MACT. The permittee may install a continuous opacity monitor (COM), in lieu of conducting the required Method 9 readings.

52. The permittee shall record all times fuels not listed in Section A II.34 and not approved by the Ohio EPA are used to heat the cold-combustion zone during incinerator start-up.

53. The permittee shall record all times waste material was fed to the kiln when any part of the control equipment was not operating within the operating limits specified in Section A.II.

54. The permittee shall maintain daily records of the amount of each fuel burned in this emissions unit.

55. The permittee shall maintain daily records of the materials received for burning at the facility. The records shall contain, as a minimum, the following information:

a. name and address of the facility from which the material was received;

b. name and address of the facility from which the material was generated or blended;

c. date the material was received;

d. amount of material and type of container; and

e. description of the material including chemical composition.

III. Monitoring and/or Record Keeping Requirements (continued)

56. The permittee shall determine the total annual benzene quantity from facility waste as required in 40 CFR 61.355, from the National Emission Standard for Benzene Waste Operations. The total annual benzene quantity from facility waste shall be calculated by adding together the annual benzene quantity for each waste stream generated during the year. The facility shall maintain records of all measurements, calculations, and other documentation used to determine the benzene content of each waste stream fed to this emissions unit.

57. The permittee shall maintain daily records of the cumulative 365-day emissions of nitrogen oxides; and beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 365-day summation of the nitrogen oxides emissions (tons). During the first 12 months of operation following the issuance of this permit, emission records for the previous 11 months shall be used and these emissions shall be maintained as a rolling 12-month record.

58. This emissions unit (N001) was evaluated based on the actual materials and the design parameters of emissions unit's exhaust system, as specified by the permittee in the application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit application and the TSCREEN model. The predicted 1-hour maximum ground-level concentration from the use of the TSCREEN model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hydrogen Chloride

Ceiling Value (mg/m3): 7.46

Maximum Hourly Emission Rate (lbs/hr): 33.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.7

MAGLC (ug/m3): 131

Pollutant: Mercury

TLV (mg/m3): 0.025

Maximum Hourly Emission Rate (lbs/hr): 1.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.594

MAGLC (ug/m3): 0.595

Pollutant: Lead

TLV(mg/m3): 0.05

Maximum Hourly Emission Rate (lbs/hr): 11.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.18

MAGLC (ug/m3): 1.19

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

III. Monitoring and/or Record Keeping Requirements (continued)

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

1. 63.1210: What are the notification requirements?

(a) Summary of requirements.

(1) You must submit the following notifications to the Administrator:

Reference Notification

63.9(b).....Initial notifications that you are subject to Subpart EEE of this Part.

63.9(d).....Notification that you are subject to special compliance requirements.

63.9(j).....Notification and documentation of any change in information already provided under Sec. 63.9.

63.1205(b)(5)(i).....Notification of changes in design, operation, or maintenance.

63.1207(e), 63.9(e),63.9(g)(1) and (3).....Notification of performance test and continuous monitoring system evaluation, including the performance test plan and CMS performance evaluation plan.

63.1210(b), 63.1207(j), 63.1207(k), 63.1207(l), 63.9(h), 63.10(d)(2), 63.10(e)(2).....Notification of compliance, including results of performance tests and continuous monitoring system performance evaluations. /1/

\1\You may also be required on a case-by-case basis to submit a feedstream analysis plan under Sec. 63.1209(c)(3).

IV. Reporting Requirements (continued)

2. 63.1210: continued

(a)(2) You must submit the following notifications to the Administrator if you request or elect to comply with alternative requirements:

Reference Notification, request, petition, or application

63.9(i).....You may request an adjustment to time periods or postmark deadlines for submittal and review of required information.

63.10(e)(3)(ii).....You may request to reduce the frequency of excess emissions and CMS performance reports.

63.10(f).....You may request to waive record keeping or reporting requirements.

63.1206(b)(4), 63.1213, 63.6(i), 63.9(c).....You may request an extension of the compliance date for up to one year.

63.1206(b)(5)(i)(C).....You may request t burn hazardous waste for more than 720 hours and for purposes other than testing or pretesting after making a change inthe design or operation that could affect compliance with emission standards and prior to submitting a revised Notification of Compliance.

63.1206(b)(8)(iii)(B).....If you elect to conduct particulate matter CEMS correlation testing and wish to have federal particulate matte and opacity standardsand associated operating limits waived during the testing, you must notify the Administrator by submitting the correlation test plan for review and approval.

63.1206(b)(8)(v).....You may request approval to have the particulate matter and opacity standards and associated operating limitsand conditions waived for more than96 hours for a correlation test.

63.1206(b)(14).....Owners and operators of incinerators may elect to comply with an alternative to the particulate matter standard.

63.1209(a)(5), 63.8(f).....You may request: (A) Approval of alternative monitoring methods for compliance with standards that are monitored with a CEMS; and (B) approval to use a CEMS in lieu of operating parameter limits.

63.1209(g)(1).....You may request approval of: (A) Alternative monitoring methods, except for standards that you must monitor with a continuous emission monitoring system (CEMS) and exceptfor request to use a CEMS in lieu of operating parameter limits; or (B) A waiver of an operating parameter limit.

63.1209(l)(1).....You may request to extrapolate mercury feedrate limits.

63.1209(n)(2)(ii).....You may request to extrapolate semivolatile and low volatile metal feedrate limits.

63.1211(d).....You may request to use data compression techniques to record data on a less frequent basis than required by Sec. 63.1209.

IV. Reporting Requirements (continued)

63.1206(c)(2)(ii)(C).....You may request to make changes to the startup, shutdown, and malfunction plan.

63.1206(c)(5)(i)(C).....You may request an alternative means of control to provide control of combustion system leaks.

63.1206(c)(5)(i)(D).....You may request other techniques to prevent fugitive emissions without use of instantaneous pressure limits.

63.1207(c)(2).....You may request to base initial compliance on data in lieu of a comprehensive performance test.

63.1207(d)(3).....You may request more than 60 days to complete a performance test if additional time is needed for reasons beyond your control.

63.1207(e)(3), 63.7(h).....You may request a time extension if the Administrator fails to approve or deny your test plan.

63.1207(h)(2).....You may request to waive current operating parameter limits during pretesting for more than 720 hours.

63.1207(f)(1)(ii)(D).....You may request a reduced hazardous waste feedstream analysis for organic hazardous air pollutants if the reduced analysis continues to be representative of organic hazardous air pollutants in your hazardous waste feedstreams.

63.1207(g)(2)(v).....You may request to operate under a wider operating range for a parameter during confirmatory performance testing.

63.1207(i).....You may request up to a one-year time extension for conducting a performance test (other than the initial comprehensive performance test) to consolidate testing with other state or federally-required testing.

63.1207(j)(4).....You may request more than 90 days to submit a Notification of Compliance after completing a peformance test if additional time is needed for reasons beyond your control.

63.1207(l)(3).....After a failure of a performance test, you may request to burn hazardous waste for more than 720 hours and for purposes other than testing or pretesting.

3. 63.1210: continued

(b) Notification of compliance.

(1) The Notification of Compliance status requirements of Sec. 63.9(h) apply, except that:

(i) The notification is a Notification of Compliance, rather than compliance status;

(ii) The notification is required for the initial comprehensive performance test and each subsequent comprehensive and confirmatory performance test; and

(iii) You must postmark the notification before the close of business on the 90th day following completion of relevant compliance demonstration activity specified in this subpart rather than the 60th day as required by Sec. 63.9(h)(2)(ii).

(2) Upon postmark of the Notification of Compliance, the operating parameter limits identified in the Notification of Compliance, as applicable, shall be complied with, the limits identified in the Documentation of Compliance or a previous Notification of Compliance are no longer applicable.

(3) The Notification of Compliance requirements of Sec. 63.1207(j) also apply.

IV. Reporting Requirements (continued)

4. 63.1211: What are the recordkeeping and reporting requirements?

(a) Summary of reporting requirements. You must submit the following reports to the Administrator:

Reference Report

63.10(d)(4).....Compliance progress reports, if required as a condition of an extension of the compliance date granted under Sec. 63.6(i).

63.10(d)(5)(i).....Periodic startup, shutdown, and malfunction reports.

63.10(d)(5)(ii).....Immediate startup, shutdown, and malfunction reports.

63.10(e)(3).....Excessive emissions and continuous monitoring system performance report and summary report.

63.1206(c)(2)(ii)(B).....Startup, shutdown, and malfunction plan.

63.1206(c)(3)(vi).....Excessive exceedances reports.

63.1206(c)(4)(iv).....Emergency saftey vent opening reports.

63.1211(b) See Monitoring and/or Record Keeping Requirements #31.

5. 63.1211(c) Documentation of compliance.

(1) By the compliance date, you must develop and include in the operating record Documentation of Compliance. You are not subject to this requirement, however, if you submit a Notification of Compliance under Sec. 63.1207(j) prior to the compliance date.

(2) The Documentation of Compliance must identify the applicable emission standards under this subpart and the limits on the operating parameters under Sec. 63.1209 that will ensure compliance with those emission standards.

(3) You must include a signed and dated certification in the Documentation of Compliance that:

(i) Required CEMS and CMS are installed, calibrated, and continuously operating in compliance with the requirements of this subpart; and,

(ii) Based on an engineering evaluation prepared under your direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation, and considering at a minimum the design, operation and maintenance characteristics of the combustor and emissions control equipment control equipment, the types, quantities, and characteristics of feedstreams, and available emissions data:

(A) You are in compliance with the emission standards of this subpart; and

(B) The limits on the operating parameters under Sec. 63.1209 ensure compliance with the emission standards of this subpart.

(4) You must comply with the emission standards and operating parameter limits specified in the Documentation of Compliance.

(d) Data compression. You may submit a written request to the Administrator for approval to use data compression techniques to record data from CMS, including CEMS, on a frequency less than that required by Sec. 63.1209. You may submit the request for review and approval as part of the comprehensive performance test plan.

(1) You must record a data value at least once each ten minutes.

IV. Reporting Requirements (continued)

(2) For each CEMS or operating parameter for which you request to use data compression techniques, you must recommend:

(i) A fluctuation limit tht defines the maximum permissible deviation of a new data value from a previously generated value without requiring you to revert to recording each one-minute value.

(A) If you exceed a fluctuation limit, you must record each one-minute value for a period of time not less than ten minutes.

(B) If neither the fluctuation limit nor the data compression limit are exceeded during that period of time, you may reinitiate recording data on a frequency of at least once each ten minutess; and

(ii) A data compression limit defined as the closest level to an operating parameter limit or emission standard at which reduced data recording is allowed.

(A) Within this level and the operating parameter limit or emission standard, you must record each one-minute average.

(B) The data compression limit should reflect a level at which you are unlikely to exceed the specific operating parameter limit or emission standard, considering its averaging period, with the addition of a new one-minute average.

6. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Northeast District Office of the Ohio EPA documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of the limitations specified in the terms and conditions of this permit, in units of the standards. These reports shall also contain the total CO emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also 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.

IV. Reporting Requirements (continued)

7. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of nitrogen oxides values in excess of the limitations specified in the terms and conditions of this permit. These reports shall also contain the total nitrogen oxides emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting any continuous nitrogen oxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

8. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting all instances of continuous O2 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 malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

9. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports which identify all periods of time during which the temperature of the kiln and the main combustion chamber did not comply with the temperature limitations, established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

Prior to the compliance date of the interim standards for 40 CFR 63, Subpart EEE and/or prior to initial compliance testing, the permittee shall submit deviation (excursion) reports which identify all periods of time during which waste material was fed to the incinerator when the main combustion chamber temperature was below 1900 degrees Fahrenheit.

10. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the minimum scrubber water flow rate and the maximum flue gas flowrate, or the minimum liquid to gas ratio for the radial-flow venturi scrubber and packed bed scrubber were not maintained at the limit(s) established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

11. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established minimum liquid feed pressure to the packed bed scrubber was not maintained as established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

12. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established minimum pressure drop across the radial-flow venturi scrubber was not maintained at the limit established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

IV. Reporting Requirements (continued)

13. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established maximum solids content of the radial-flow venturi and packed bed scrubbers were not maintained at the limit established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211, based on an hourly rolling average if measured manually, or on a 12-hour rolling average if measured with a CMS.

14. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established minimum pressure drop across the packed bed scrubber was not maintained as established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

15. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH in the gas-liquid contactor (packed bed scrubber) was not maintained as established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

16. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the 1-hr average total combined power input to all fields of the WESP(s) was less than that required in operational restriction specified in Section A.II.43.e of this permit;

17. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the total hourly waste feed to the kiln and main combustion chamber exceeded 24,000 pounds per hour, excluding the exception described in Section A.II.37. The report shall indicate the amount of waste fed during that period.

18. The permittee shall submit quarterly deviation (excursion) reports that identify any day in which records were not maintained of the waste feed analysis, as required in Sections A.III.40 or A.III.41.

19. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which waste with a concentration of greater than 50 ppm of PCB was fed to the kiln or to the main combustion chamber. The report shall indicate the amount of waste fed during that period and the PCB concentration.

20. The permittee shall submit reports on every ESV opening that occurs while hazardous waste is being combusted. These reports shall contain at a minimum:

a. the date and the time(s) the bypass vent was opened and closed;

b. the amount of waste in the kiln and the main combustion chamber at the time the vent opened;

c. an estimate of air emissions, using the best available data, including emissions of particulate emissions, hydrocarbons, hydrogen chloride, sulfur dioxide, nitrogen oxides, carbon monoxide, beryllium, lead, mercury and other hazardous air pollutants (HAPs); and

d. the cause(s) of the ESV opening.

21. The permittee shall comply with the reporting requirements found in Sections 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211 of the hazardous waste combustor MACT, 40 CFR Part 63 Subpart EEE, by the compliance dates of the interim and final (when promulgated) MACT Rules.

22. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the cumulative rolling, 365-day NOx emissions limitation; and for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the cumulative rolling 12-month NOx emission limit, calculated from the emission records for the present and previous 11 months.

IV. Reporting Requirements (continued)

23. The permittee shall submit quarterly deviation reports to the Ohio EPA Northeast District Office documenting any of the following event(s):

a. each event in which the kiln or main combustion draft pressure was less than 0.05 inches of water pressure for 30 seconds or longer in the kiln and/or for 15 seconds or longer for the main combustion chamber;

b. any period of time in which the draft transmitters did not maintain a record of the pressure inside the kiln and/or main combustion chamber during each 10 second period of operation; and or

c. any waste feed cut-off event(s), actuated as a result of an excursion from the RCRA Part B Permit conditions.

The reports shall include the date, time, duration, reason for the occurrence, and any corrective action(s) taken. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit deviation reports for any AWFCO event, as required in Section 63.1206(c)(3) and 63.1210 of the rule. The permittee shall submit quarterly deviation reports for any such event, as well as a report of any week in which the weekly AWFCO operability testing did not occur or was not documented; and/or a record documenting that the weekly inspection would have restricted or upset operations during any such week was not maintained, and/or the monthly inspection event did not occur and/or was not documented.

24. The permittee shall submit quarterly deviation (excursion) reports that identify all times fuels other than those allowed by Section A.II.34 are used to heat the cold combustion zone during incinerator start-up.

25. The permittee shall submit quarterly deviation (excursion) reports that identify any period of time in which waste was fed to the kiln, while any part of the control equipment was non-operational (excluding a second WESP), and/or not operating as required in Section A.II.43.

26. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established maximum flue gas flow rate or maximum production/process rate was/were not maintained at the limit established (used as an indicator of gas residence time in the incinerator and control devices) in accordance with 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211, during the most recent performance test, based on an hourly rolling average.

27. The permittee shall submit quarterly deviation reports that identify each day in which a Method 9 reading(s) demonstrated an exceedance of the 20% opacity limit, and/or each week during which four Method 9 readings were not conducted for at least 30 minutes on each of the four days. This report shall include the date, duration, and cause for the exceedance. If a more stringent standard is developed upon promulgation of the final rules for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports of non-compliance with the final MACT standard. In the event the permittee decides to install a COM, non-compliance with the Method 9 reporting requirements shall be replace by reporting any exceedance of the opacity limit, as demonstrated by the COM.

IV. Reporting Requirements (continued)

28. The permittee shall submit the following notifications of performance testing and site-specific test plans as follows:

a. The permittee shall submit a notification of intention to conduct the initial comprehensive performance test and CMS performance evaluation and must submit a site-specific test plan and CMS performance evaluation test plan at least one year before the initial performance test and performance evaluation are scheduled to begin. The Director shall notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan. The permittee shall notify the Ohio EPA of the intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin.

b. Following the compliance date of the final standards for 40 CFR 63, Subpart EEE, the permittee shall submit a notification of intention to conduct the comprehensive performance test and CMS performance evaluation and must submit a site-specific test plan and CMS performance evaluation test plan at least one year before the performance test and performance evaluation are scheduled to begin. The Director shall notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan. The permittee shall notify the Ohio EPA of the intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin.

c. Following the compliance date of the final standards for 40 CFR 63, Subpart EEE, the permittee shall submit a notification of intention to conduct the confirmatory performance tests and CMS performance evaluation and must submit a site-specific test plan and CMS performance evaluation test plan at least 60 calendar days before the performance test and performance evaluation are scheduled to begin. The Director shall notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 30 calendar days after receipt of the original plan. The Ohio EPA must issue a public notice announcing the approval of the test plans and the location where the test plans are available for review.

29. Following the initial comprehensive performance test and each subsequent comprehensive and confirmatory performance test, the permittee shall establish and document the hourly rolling average operating parameters, as required by 40 CFR 63.1209. Within 90 days of completion of a comprehensive or confirmatory performance test, the permittee shall postmark a NOC documenting compliance or noncompliance with the emissions standards and continuous monitoring system requirements, and identifying the operating parameter limits established under 40 CFR 63.1209 and 63.1210.

30. The permittee shall notify the Ohio EPA by February 1 of each year if the total annual benzene quantity equals or exceeds 10 megagrams per year.

V. Testing Requirements

1. 40 CFR 63, Subpart EEE: Monitoring and Compliance Provisions

63.1207: What are the performance testing requirements?

(a) General. The provisions of 63.7 apply, except as noted below.

(b) Types of performance tests

(1) Comprehensive performance test. You must conduct comprehensive performance tests to demonstrate compliance with the emission standards provided by 63.1203, 63.1204, and 63.1205, establish limits for the operating parameters provided by 63.1209, and demonstrate compliance with the performance specifications for continuous monitoring systems.

(2) Confirmatory performance test. You must conduct confirmatory performance tests to:

(i) Demonstrate compliance with the dioxin/furan emission standard when the source operates under normal operating conditions; and

(ii) Conduct a performance evaluation of continuous monitoring systems required for compliance assurance with the dioxin/furan emission standard under 63.1209(k).

(c) Initial comprehensive performance test

(1) Test date. Except as provided by paragraph (c)(2) of this section, you must commence the initial comprehensive performance test not later than six months after the compliance date.

(2) Data in lieu of the initial comprehensive performance test.

(i) You may request that previous emissions test data serve as documentation of conformance with the emission standards of this subpart provided that the previous testing was:

(A) Was initiated after 54 months prior to the compliance date, except as provided by paragraphs (c)(2)(iii) or (c)(2)iv) of this section;

(B) Results in data that meet quality assurance objectives (determined on a site-specific basis) such that the results demonstrate compliance with the applicable standards;

(C) Was in conformance with the requirements of paragraph (g)(1) of this section; and

(D) Was sufficient to establish the applicable operating parameter limits under 63.1209.

V. Testing Requirements (continued)

2. 63.1207: continued

(c)(2)(ii) You must submit data in lieu of the initial comprehensive performance test in lieu of (i.e., if the data are in lieu of all performance testing) or with the notification of performance test required under paragraph (e) of this section.

(iii) The data in lieu of test age restriction provided in paragraph (c)(2)(i)(A) of this section does not apply for the duration of the interim standards (i.e., the standard published in the Federal Register on February 13, 2002. Paragraph (c)(2)(i)(A) of this section does not apply until EPA promulgates permanent replacement standards pursuant to the Settlement Agreement noticed in the Federal Register on November 16, 2001.

(iv) The data in lieu test age restriction provided in paragraph (c)(2)(i)(A) of this section does not apply to DRE data provided you do not feed hazardous waste at a location in the combustion system other than the normal flame zone.

(d) Frequency of testing. You must conduct testing periodically as prescribed in paragraphs (d)(1) through (3) of this section. The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. You may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test. Unless the Administrator grants a time extension under paragraph (i) of this section, you must conduct testing as follows:

3. 63.1207: continued

(d)(1) Comprehensive performance testing. Except as otherwise specified in paragraph (d)(4) of this section, you must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test. If you submit data in lieu of the initial performance test, you must commence the subsequent comprehensive performance test within 61 months of commencing the test used to provide the data in lieu of the initial performance test.

(2) Confirmatory performance testing. Except as otherwise specified in paragraph (d)(4) of this section, you must commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test. If you submit data in lieu of the initial performance test, you must commence the initial confirmatory performance test within 31 months of the date six months after the compliance date. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.

(3) Duration of testing. You must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on your documentation in writing of factors beyond your control that prevent you from meeting the 60-day deadline.

(4) Applicable testing requirements under the interim standards.

V. Testing Requirements (continued)

4. 63.1207: continued

(d)(4)(i) Waiver of periodic comprehensive performance tests. Except as provided by paragraph (c)(2) of this section, you must conduct only an initial comprehensive performance test under the interim standards (i.e., the standards published in the Federal Register on February 13, 2002; all subsequent comprehensive performance testing requirements are waived under the interim standards. The provisions in the introductory text to paragraph (d) and in paragraph (d)(1) of this section do not apply until EPA promulgates permanent replacement standards pursuant to the Settlement Agreement noticed in the Federal Register on November 16, 2001.

(ii) Waiver of confirmatory performance tests. You are not required to conduct a confirmatory test under the interim standards (i.e., the standards published in the Federal Register on February 13, 2002. The confirmatory testing requirements in the introductory text to paragraph (d) and in paragraph (d)(2) of this section are waived until EPA promulgates permanent replacement standards pursuant to the Settlement Agreement noticed in the Federal Register on November 16, 2001.

(e) Notification of performance test and CMS performance evaluation, and approval of test plan and CMS performance evaluation plan.

(1) The provisions of 63.7(b) and (c) and 63.8(e) apply, except:

(i) Comprehensive performance test. You must submit to the Administrator a notification of your intention to conduct a comprehensive performance test and CMS performance evaluation and a site-specific test plan and CMS performance evaluation test plan at least one year before the performance test and performance evaluation are scheduled to begin.

(A) The Administrator will notify you of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan.

5. 63.1207: continued

(e)(1)(i)(B) You must submit to the Administrator a notification of your intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin.

(ii) Confirmatory performance test. You must submit to the Administrator a notification of your intention to conduct a confirmatory performance test and CMS performance evaluation and a site-specific test plan and CMS performance evaluation test plan at least 60 calendar days before the performance test is scheduled to begin. The Administrator will notify you of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 30 calendar days after receipt of the original test plans.

(2) After the Administrator has approved the site-specific test plan and CMS performance evaluation test plan, you must make the test plans available to the public for review. You must issue a public notice announcing the approval of the test plans and the location where the test plans are available for review.

(3) Petitions for time extension if Administrator fails to approve or deny test plans. You may petition the Administrator under Sec. 63.7(h) to obtain a "waiver" of any performance test - initial or periodic performance test; comprehensive or confirmatory test. The "waiver" would be implemented as an extension of time to conduct the performance test at a later date.

(i)Qualifications for the waiver.

(A) You may not petition the Administrator for a waiver under this section if the Administrator has issued a notification of intent to deny your test plan(s) under Sec. 63.7(c)(3)(i)(B);

V. Testing Requirements (continued)

6. 63.1207 continued:

(e)(3)(i)(B) You must submit a site-specific emissions testing plan and a continuous monitoring system performance evaluation test plan at least one year before a comprehensive performance test is scheduled to begin as required by paragraph (c)(1) of this section, or at least 60 days before a confirmatory performance test is scheduled to begin as required by paragraph (d) of this section. The test plans must include all required documentation, including the substantive content requirements of paragraph (f) of this section and Sec. 63.8(e); and

(C) You must make a good faith effort to accommodate the Administrator's comments on the test plans.

(ii) Procedures for obtaining a waiver and duration of the waiver:

(A) You must submit to the Administrator a waiver petition or request to renew the petition under Sec. 63.7(h) separately for each source at least 60 days prior to the scheduled date of the performance test;

(B) The Administrator will approve or deny the petition within 30 days of receipt and notify you promptly of the decision;

(C) The Administrator will not approve an individual waiver petition for a duration exceeding 6 months;

(D) The Administrator will include a sunset provision in the waiver ending the waiver within 6 months;

(E) You may submit a revised petition to renew the waiver under Sec. 63.7(h)(3)(iii) at least 60 days prior to the end date of the most recently approved waiver petition;

(F) The Administrator may approve a revised petition for a total waiver period up to 12 months.

(iii) Content of the waiver.

(A) You must provide documentation to enable the Administrator to determine that the source is meeting the relevant standard(s) on a continuous basis as required by Sec. 63.7(h)(2). For extension requests for the initial comprehensive performance test, you must submit your Documentation of Compliance toassist the Administrator in making this determination.

V. Testing Requirements (continued)

7. 63.1207 continued:

(e)(3)(iii)(B) You must include in the petition information justifying your request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test, as required by Sec. 63.7(h)(3)(iii).

(iv) Public Notice. You must notify the public (e.g., distribute public mailing list) of your petition to waive a performance test.

(f) Content of performance test plan. The provisions of 63.7(c)(2)(i)-(iii) and (v) regarding the content of the test plan apply. In addition, you must include the following information in the test plan:

(1) Content of comprehensive performance test plan.

(i) An analysis of each feedstream, including hazardous waste, other fuels, and industrial furnace feedstocks, as fired, that includes:

(A) Heating value, levels of ash (for hazardous waste incinerators only), levels of semivolatile metals, low volatile metals, mercury, and total chlorine (organic and inorganic); and

(B) Viscosity or description of the physical form of the feedstream;

(ii) For organic hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by 63.60:

(A) Except as provided by paragraph (f)(1)(ii)(D) of this section, an identification of such organic hazardous air pollutants that are present in each hazardous waste feedstream. You need not analyze for organic hazardous air pollutants that would reasonably not be expected to be found in the feedstream. You must identify any constituents you exclude from analysis and explain the basis for excluding them. You must conduct the feedstream analysis according to Sec. 63.1208(b)(8);

(B) An approximate quantification of such identified organic hazardous air pollutants in the hazardous waste feedstreams, within the precision produced by the analytical procedures of Sec. 63.1208(b)(8); and

V. Testing Requirements (continued)

8. 63.1207: continued

(f)(1)(ii)(C) A description of blending procedures, if applicable, prior to firing the feedstream, including a detailed analysis of the materials prior to blending, and blending ratios;

(D) The Administrator may approve on a case-by-case basis a hazardous waste feedstream analysisfor organic hazardous air pollutants in lieu of the analysis required under paragraph (f)(1)(ii)(A) of this section if the reduced analysis is sufficient to ensure that the POHCs used to demonstrate compliance with the aplicable DRE standard of Sec. 63.1203, Sec. 63.1204, or Sec. 63.1205, continue to be representative of the organic hazardous air pollutants in your hazardous waste feedstreams;

(iii) A detailed engineering description of the hazardous waste combustor, including:

(A) Manufacturer's name and model number of the hazardous waste combustor;

(B) Type of hazardous waste combustor;

(C) Maximum design capacity in appropriate units;

(D) Description of the feed system for each feedstream;

(E) Capacity of each feed system;

(F) Description of automatic hazardous waste feed cutoff system(s);

(G) Description of the design, operation, and maintenance practices for any air pollution control system; and

(H) Description of the design, operation, and maintenance practices of any stack gas monitoring and pollution control monitoring systems;

(iv) 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;

(v) A detailed test schedule for each hazardous waste for which the performance test is planned, including date(s), duration, quantity of hazardous waste to be burned, and other relevant factors;

V. Testing Requirements (continued)

9. 63.1207: continued

(f)(1)(vi) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feedrate for each feed system, and, as appropriate, the feedrates of other fuels and feedstocks, and any other relevant parameters that may affect the ability of the hazardous waste combustor to meet the emission standards;

(vii) A description of, and planned operating conditions for, any emission control equipment that will be used;

(viii) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction;

(ix) A determination of the hazardous waste residence time as required by 63.1206(b)(11);

(x) If you are requesting to extrapolate metal feedrate limits from comprehensive performance test levels under 63.1209(l)(1)(i) or 63.1209(n)(2)(ii))(A):

(A) A description of the extrapolation methodology and rationale for how the approach ensures compliance with the emission standards;

(B) Documentation of the historical range of normal (i.e., other than during compliance testing) metals feedrates for each feedstream;

(C) Documentation that the level of spiking recommended during the performance test will mask sampling and analysis imprecision and inaccuracy to the extent that the extrapolated feedrate limits adequately assure compliance with the emission standards;

(xi) If you do not continuously monitor regulated constituents in natural gas, process air feedstreams, and feedstreams from vapor recovery systems under 63.1209(c)(5), you must include documentation of the expected levels of regulated constituents in those feedstreams;

(xii) Documentation justifying the duration of system conditioning required to ensure the combustor has achieved steady-state operations under performance test operating conditions, as provided by paragraph (g)(1)(iii) of this section;

V. Testing Requirements (continued)

10. 63.1207: continued

(f)(1)(xiii) This paragraph of the regulation is not applicable to this permittee.

(xiv) This paragraph of the regulation is not applicable to this permittee.

(xv) Reserved

(xvi) If you are not required to conduct performance testing to document compliance with the mercury, semivolatile metal, low volatile metal, or hydrochloric acid/chlorine gas emission standards under paragraph (m) of this section, you must include with the comprehensive performance test plan documentation of compliance with the provisions of that section.

(xvii) If you propose to use a surrogate for measuring or monitoring gas flowrate, you must document in the comprehensive performance test plan that the surrogate adequately correlates with gas flowrate, as required by paragraph (m)(7) of this section, and 63.1209(j)(2), (k)(3), (m)(2)(i), (m)(5)(i), and (o)(2)(i).

(xviii) You must submit an application to request alternative monitoring under 63.1209(g)(1) not later than with the comprehensive performance test plan, as required by 63.1209(g)(1)(iii)(A).

(xix) You must document the temperature location measurement in the comprehensive performance test plan, as required by 63.1209(j)(1)(i) and 63.1209(k)(2)(i).

(xx) If your source is equipped with activated carbon injection, you must document in the comprehensive performance test plan:

(A) The manufacturer specifications for minimum carrier fluid flowrate or pressure drop, as required by 63.1209(k)(6)(ii); and

(B) Key parameters that affect carbon adsorption, and the operating limits you establish for those parameters based on the carbon used during the performance test, if you elect not to specify and use the brand and type of carbon used during the comprehensive performance test, as required by 63.1209(k)(6)(iii).

V. Testing Requirements (continued)

11. 63.1207: continued

(f)(1)(xxi) If your source is equipped with a carbon bed system, you must include in the comprehensive performance test plan:

(A) A recommended schedule for conducting a subsequent performance test to document compliance with the dioxin/furan and mercury emission standards if you use manufacturer specifications rather than actual bed age at the time of the test to establish the initial limit on bed age, as required by 63.1209(k)(7)(i)(C); and

(B) Key parameters that affect carbon adsorption, and the operating limits you establish for those parameters based on the carbon used during the performance test, if you elect not to specify and use the brand and type of carbon used during the comprehensive performance test, as required by 63.1209(k)(7)(ii).

(xxii) If you feed a dioxin/furan inhibitor into the combustion system, you must document in the comprehensive performance test plan key parameters that affect the effectiveness of the inhibitor, and the operating limits you establish for those parameters based on the inhibitor fed during the performance test, if you elect not to specify and use the brand and type of inhibitor used during the comprehensive performance test, as required by 63.1209(k)(9)(ii).

(xxiii) If your source is equipped with a wet scrubber and you elect to monitor solids content of the scrubber liquid manually but believe that hourly monitoring of solids content is not warranted, you must support an alternative monitoring frequency in the comprehensive performance test plan, as required by 63.1209(m)(1)(i)(B)(1)(i).

(xxiv) If your source is equipped with a particulate matter control device other than a wet scrubber, baghouse, or electrostatic precipitator, you must include in the comprehensive performance test plan:

(A) Documentation to support the operating parameter limits you establish for the control device, as required by 63.1209(m)(1)(iv)(A)(4); and

12. 63.1207: continued

(f)(1)(xxiv)(B) Support for the use of manufacturer specifications if you recommend such specifications in lieu of basing operating limits on performance test operating levels, as required by 63.1209(m)(1)(iv)(D).

(xxv) If your source is equipped with a dry scrubber to control hydrochloric acid and chlorine gas, you must document in the comprehensive performance test plan key parameters that affect adsorption, and the limits you establish for those parameters based on the sorbent used during the performance test, if you elect not to specify and use the brand and type of sorbent used during the comprehensive performance test, as required by 63.1209(o)(4)(iii)(A); and

(xxvi) For purposes of calculating semivolatile metal, low volatile metal, mercury, and total chlorine (organic and inorganic), and ash feedrate limits, a description of how you will handle performance test feedstream analytical results that determines these constituents are not present at detectable levels.

(xxvii) Such other information as the Administrator reasonably finds necessary to determine whether to approve the performance test plan.

(2) Content of confirmatory test plan.

(i) A description of your normal hydrocarbon or carbon monoxide operating levels, as specified in paragraph (g)(2)(i) of this section, and an explanation of how these normal levels were determined;

(ii) A description of your normal applicable operating parameter levels, as specified in paragraph (g)(2)(ii) of this section, and an explanation of how these normal levels were determined;

(iii) A description of your normal chlorine operating levels, as specified in paragraph (g)(2)(iii) of this section, and an explanation of how these normal levels were determined;

V. Testing Requirements (continued)

13. 63.1207: continued

(f)(2)(iv) If you use carbon injection or a carbon bed, a description of your normal cleaning cycle of the particulate matter control device, as specified in paragraph (g)(2)(iv) of this section, and an explanation of how these normal levels were determined;

(v) 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;

(vi) A detailed test schedule for each hazardous waste for which the performance test is planned, including date(s), duration, quantity of hazardous waste to be burned, and other relevant factors;

(vii) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feedrate for each feed system, and, as appropriate, the feedrates of other fuels and feedstocks, and any other relevant parameters that may affect the ability of the hazardous waste combustor to meet the dioxin/furan emission standard;

(viii) A description of, and planned operating conditions for, any emission control equipment that will be used;

(ix) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction; and

(x) Such other information as the Administrator reasonably finds necessary to determine whether to approve the confirmatory test plan.

(g) Operating conditions during testing. You must comply with the provisions of Sec. 63.7(e). Conducting performance testing under operating conditions representative of the extreme range of normal conditions is consistent with the requirement of Sec. 63.7(e)(1) to conduct performance testing under representative operating conditions.

(1) Comprehensive performance testing.

V. Testing Requirements (continued)

14. 63.1207: continued

(g)(1)(i) Operations during testing. For the following parameters, you must operate the combustor during the performance test under normal conditions (or conditions that will result in higher than normal emissions):

(A) Chlorine feedrate. You must feed normal (or higher) levels of chlorine during the dioxin/furan performance test;

(B) Ash feedrate. For hazardous waste incinerators, you must conduct the following tests when feeding normal (or higher) levels of ash: The semivolatile metal and low volatile metal performance tests; and the dioxin/furan and mercury performance tests if activated carbon injection or a carbon bed is used; and

(C) Cleaning cycle of the particulate matter control device. You must conduct the following tests when the particulate matter control device undergoes its normal (or more frequent) cleaning cycle: The particulate matter, semivolatile metal, and low volatile metal performance tests; and the dioxin/furan and mercury performance tests if activated carbon injection or a carbon bed is used.

(ii) Modes of operation. Given that you must establish limits for the applicable operating parameters specified in Sec. 63.1209 based on operations during the comprehensive performance test, you may conduct testing under two or more operating modes to provide operating flexibility.

(iii) Steady-state conditions.

(A) Prior to obtaining performance test data, you must operate under performance test conditions until you reach steady-state operations with respect to emissions of pollutants you must measure during the performance test and operating parameters under Sec. 63.1209 for which you must establish limits. During system conditioning, you must ensure that each operating parameter for which you must establish a limit is held at the level planned for the performance test. You must include documentation in the performance test plan under paragraph (f) of this section justifying the duration of system conditioning.

15. 63.1207: continued

(g)(1)(iii)(B) This paragraph of the regulation is not applicable to this permittee.

(2) Confirmatory performance testing. You must conduct confirmatory performance testing for dioxin/furan under normal operating conditions for the following parameters:

(i) Carbon monoxide (or hydrocarbon) CEMS emission levels must be within the range of the average value to the maximum value allowed, except as provided by paragraph (g)(2)(iv) of this section. The average value is defined as the sum of the hourly rolling average values recorded (each minute) over the previous 12 months divided by the number of rolling averages recorded during that time. The average value must not include calibration data, startup data, shutdown data, malfunction data, and data obtained when not burning hazardous waste;

(ii) Each operating limit (specified in Sec. 63.1209) established to maintain compliance with the dioxin/furan emission standard must be held within the range of the average value over the previous 12 months and the maximum or minimum, as appropriate, that is allowed, except as provided by paragraph (g)(2)(iv) of this section. The average value is defined as the sum of the rolling average values recorded over the previous 12 months divided by the number of rolling averages recorded during that time. The average value must not include calibration data, malfunction data, and data obtained when not burning hazardous waste;

V. Testing Requirements (continued)

16. 63.1207: continued

(g)(2)(iii) You must feed chlorine at normal feedrates or greater; and

(iv) If the combustor is equipped with carbon injection or carbon bed, normal cleaning cycle of the particulate matter control device.

(v) The Administrator may approve an alternative range to that required by paragraph (g)(2)(i) and (ii) of this section if you document in the confirmatory performance test plan that it may be problematic to maintain the required range during the test. In addition, when making the findings of compliance, the Administrator may consider test conditions outside of the range specified in the test plan based on a finding that you could not reasonably maintain the range specified in the test plan and considering factors including whether the time duration and level of the parameter when operations were out of the specified range were such that operations during the confirmatory test are determined to be reasonably representative of normal operations. In addition, the Administrator will consider the proximity of the emission test results to the standard.

(h) Operating conditions during subsequent testing.

(1) Current operating parameter limits established under Sec. 63.1209 are waived during subsequent comprehensive performance testing.

(2) Current operating parameter limits are also waived during pretesting prior to comprehensive performance testing for an aggregate time not to exceed 720 hours of operation (renewable at the discretion of the Administrator) under an approved test plan or if the source records the results of the pretesting. Pretesting means:

(i) Operations when stack emissions testing for dioxin/furan, mercury, semivolatile metals, low volatile metals, particulate matter, or hydrochloric acid/chlorine gas is being performed; and

(ii) Operations to reach steady-state operating conditions prior to stack emissions testing under paragraph (g)(1)(iii) of this section.

17. 63.1207: continued

(i) Time extension for subsequent performance tests. After the initial comprehensive performance test, you may request up to a one-year time extension for conducting a comprehensive or confirmatory performance test to consolidate performance testing with other state or federally required emission testing, or for other reasons deemed acceptable by the Administrator. If the Administrator grants a time extension for a comprehensive performance test, the deadlines for commencing the next comprehensive and confirmatory tests are based on the date that the subject comprehensive performance test commences.

(1) You must submit in writing to the Administrator any request under this paragraph for a time extension for conducting a performance test.

(2) You must include in the request for an extension for conducting a performance test the following:

(i) A description of the reasons for requesting the time extension;

(ii) The date by which you will commence performance testing.

(3) The Administrator will notify you in writing of approval or intention to deny approval of your request for an extension for conducting a performance test within 30 calendar days after receipt of sufficient information to evaluate your request. The 30-day approval or denial period will begin after you have been notified in writing that your application is complete. The Administrator will notify you in writing 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 you submit.

V. Testing Requirements (continued)

18. 63.1207: continued

(i)(4) When notifying you that your application is not complete, the Administrator will specify the information needed to complete the application. The Administrator will also provide notice of opportunity for you to present, in writing, within 30 calendar days after notification of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(5) Before denying any request for an extension for performance testing, the Administrator will notify you in writing of the Administrator's intention to issue the denial, together with:

(i) Notice of the information and findings on which the intended denial is based; and

(ii) Notice of opportunity for you to present in writing, within 15 calendar days after notification of the intended denial, additional information or arguments to the Administrator before further action on the request.

(6) The Administrator's final determination to deny any request for an extension will be in writing and will set forth specific grounds upon which the denial is based. The final determination will be made within 30 calendar days after the 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.

(j) Notification of compliance.

(1) Comprehensive performance test.

(i) Within 90 days of completion of a comprehensive performance test, you must postmark a Notification of Compliance documenting compliance or noncompliance with the emission standards and continuous monitoring system requirements, and identifying operating parameter limits under Sec. 63.1209.

19. 63.1207: continued

(j)(1)(ii) Upon postmark of the Notification of Compliance, you must comply with all operating requirements specified in the Notification of Compliance in lieu of the limits specified in the Documentation of Compliance required under 63.1211(c).

(2) Confirmatory performance test. Except as provided by paragraph (j)(4) of this section, within 90 days of completion of a confirmatory performance test, you must postmark a Notification of Compliance documenting compliance or noncompliance with the applicable dioxin/furan emission standard.

(3) See 63.7(g), 63.9(h), and 63.1210(b) for additional requirements pertaining to the Notification of Compliance (e.g., you must include results of performance tests in the Notification of Compliance).

(4) Time extension. You may submit a written request to the Administrator for a time extension documenting that, for reasons beyond your control, you may not be able to meet the 90-day deadline for submitting the Notification of Compliance after completion of testing. The Administrator will determine whether a time extension is warranted.

(k) Failure to submit a timely notification of compliance.

(1) If you fail to postmark a Notification of Compliance by the specified date, you must cease hazardous waste burning immediately.

(2) Prior to submitting a revised Notification of Compliance as provided by paragraph (k)(3) of this section, you may burn hazardous waste only for the purpose of pretesting or comprehensive performance testing and only for a maximum of 720 hours (renewable at the discretion of the Administrator).

(3) You must submit to the Administrator a Notification of Compliance subsequent to a new comprehensive performance test before resuming hazardous waste burning.

V. Testing Requirements (continued)

20. 63.1207: continued

(l) Failure of performance test

(1) Comprehensive performance test. The provisions of this paragraph do not apply to the initial comprehensive performance test if you conduct the test prior to September 30, 2003 (or a later compliance date approved under Sec. 63.6(i))

(i) If you determine (based on CEM recordings, results of analyses of stack samples, or results of CMS performance evaluations) that you have exceeded any emission standard during a comprehensive performance test for a mode of operation, you must cease hazardous waste burning immediately under that mode of operation. You must make this determination within 90 days following completion of the performance test.

(ii) If you have failed to demonstrate compliance with the emission standards for any mode of operation:

(A) Prior to submitting a revised Notification of Compliance as provided by paragraph (l)(1)(ii)(C) of this section, you may burn hazardous waste only for the purpose of pretesting or comprehensive performance testing under revised operating conditions, and only for a maximum of 720 hours (renewable at the discretion of the Administrator), except as provided by paragraph (l)(3) of this section;

(B) You must conduct a comprehensive performance test under revised operating conditions following the requirements for performance testing of this section; and

(C) You must submit to the Administrator a Notification of Compliance subsequent to the new comprehensive performance test.

(2) Confirmatory performance test. If you determine (based on CEM recordings, results of analyses of stack samples, or results of CMS performance evaluations) that you have failed the dioxin/furan emission standard during a confirmatory performance test, you must cease burning hazardous waste immediately. You must make this determination within 90 days following completion of the performance test. To burn hazardous waste in the future:

21. 63.1207: continued

(l)(2)(i) You must submit to the Administrator for review and approval a test plan to conduct a comprehensive performance test to identify revised limits on the applicable dioxin/furan operating parameters specified in 63.1209(k);

(ii) You must submit to the Administrator a Notification of Compliance with the dioxin/furan emission standard under the provisions of paragraphs (j) and (k) of this section and this paragraph (l). You must include in the Notification of Compliance the revised limits on the applicable dioxin/furan operating parameters specified in 63.1209(k); and

(iii) Until the Notification of Compliance is submitted, you must not burn hazardous waste except for purposes of pretesting or confirmatory performance testing, and for a maximum of 720 hours (renewable at the discretion of the Administrator), except as provided by paragraph (l)(3) of this section.

(3) You may petition the Administrator to obtain written approval to burn hazardous waste in the interim prior to submitting a Notification of Compliance for purposes other than testing or pretesting. You must specify operating requirements, including limits on operating parameters, that you determine will ensure compliance with the emission standards of this subpart based on available information including data from the failed performance test. The Administrator will review, modify as necessary, and approve if warranted the interim operating requirements. An approval of interim operating requirements will include a schedule for submitting a Notification of Compliance.

(m) Waiver of performance test.

(1) The waiver provision of this paragraph applies in addition to the provisions of 63.7(h).

V. Testing Requirements (continued)

22. 63.1207: continued

(m)(2) You are not required to conduct performance tests to document compliance with the mercury, semivolatile metal, low volatile metal or hydrochloric acid/chlorine gas emission standards under the conditions specified below. You are deemed to be in compliance with an emission standard if the 12-hour rolling average maximum theoretical emission concentration (MTEC) determined as specified below does not exceed the emission standard:

(i) Determine the feedrate of mercury, semivolatile metals, low volatile metals, or total chlorine and chloride from all feedstreams;

(ii) Determine the stack gas flowrate; and

(iii) Calculate a MTEC for each standard assuming all mercury, semivolatile metals, low volatile metals, or total chlorine (organic and inorganic) from all feedstreams is emitted;

(3) To document compliance with this provision, you must:

(i) Monitor and record the feedrate of mercury, semivolatile metals, low volatile metals, and total chlorine and chloride from all feedstreams according to section 63.1209(c);

(ii) Monitor with a CMS and record in the operating record the gas flowrate (either directly or by monitoring a surrogate parameter that you have correlated to gas flowrate);

(iii) Continuously calculate and record in the operating record the MTEC under the procedures of paragraph (m)(2) of this section; and

(iv) Interlock the MTEC calculated in paragraph (m)(2)(iii) of this section to the AWFCO system to stop hazardous waste burning when the MTEC exceeds the emission standard.

(4) In lieu of the requirement in paragraphs (m)(3)(iii) and (iv) of this section, you may:

23. 63.1207: continued

(m)(4)(i) Identify in the notification of compliance a minimum gas flowrate limit and a maximum feedrate limit of mercury, semivolatile metals, low volatile metals, and/or total chlorine and chloride from all feedstreams that ensures the MTEC as calculated in paragraph (m)(2)(iii) of this section is below the applicable emission standard; and

(ii) Interlock the minimum gas flowrate limit and maximum feedrate limit in paragraph (m)(3)(iv) of this section to the AWFCO system to stop hazardous waste burning when the gas flowrate or mercury, semivolatile metals, low volatile metals, and/or total chlorine and chloride feedrate exceeds the limit in paragraph (m)(4)(i) of this section.

(5) When you determine the feedrate of mercury, semivolatile metals, low volatile metals, or total chlorine and chloride for purposes of this provision, except as provided by paragraph (m)(6) of this section, you must assume that the analyte is present at the full detection limit when the feedstream analysis determines that the analyte is not detected in the feedstream.

(6) This paragraph of the regulation is not applicable to this permittee.

(7) You must state in the site-specific test plan that you submit for review and approval under paragraph (e) of this section that you intend to comply with the provisions of this paragraph. You must include in the test plan documentation that any surrogate that is proposed for gas flowrate adequately correlates with the gas flowrate.

V. Testing Requirements (continued)

24. 40 CFR 63, Subpart EEE: Monitoring and Compliance Provisions

63.1208: What are the test methods?

(a) References. When required in subpart EEE of this part, the following publication is incorporated by reference, "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). The Third Edition of SW-846 and Updates I, II, IIA, IIB, and III (document number 955-001-00000-1) are available for the Superintendent of Document, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800. Copies of the Third Edition and its updates are also available from the National Technical Information Services (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4650. Copies may be inspected at the Library, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

(b) Test methods. You must use the following test methods to determine compliance with the emissions standards of this subpart:

(1) Dioxins and furans.

(i) You must use Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans emissions from Stationary Sources, EPA Publication SW-846, as incorporated by reference in paragraph (a) of this section, to determine compliance with the emission standard for dioxins and furans;

(ii) You must sample for a minimum of three hours, and you must collect a minimum sample volume of 2.5 dscm;

(iii) You may assume that nondetects are present at zero concentration.

(2) Mercury. You must use Method 29, provided in appendix A, part 60 of this chapter, to demonstrate compliance with emission standard for mercury.

25. 63.1208: continued

(b)(3) Cadmium and lead. You must use Method 29, provided in appendix A, part 60 of this chapter, to determine compliance with the emission standard for cadmium and lead (combined).

(4) Arsenic, beryllium, and chromium. You must use Method 29, provided in appendix A, part 60 of this chapter, to determine compliance with the emission standard for arsenic, beryllium, and chromium (combined).

(5) Hydrochloric acid and chlorine gas. You may use Methods 26A, 320, or 321 provided in appendix A, part 60 of this chapter, to determine compliance with the emission standard for hydrochloric acid and chlorine gas (combined). You may use Methods 320 or 321 to make major source determinations under Sec. 63.9(b)(2)(v).

(6) Particulate matter. You must use Methods 5 or 5I, provided in appendix A, part 60 of this chapter, to demonstrate compliance with the emission standard for particulate matter.

(7) Other Test Methods. You may use applicable test methods in EPA Publication SW-846, as incorporated by reference in paragraph (a) of this section, as necessary to demonstrate compliance with requirements of this subpart, except as otherwise specified in paragraphs (b)(2)-(b)(6) of this section.

(8) Feedstream analytical methods. You may use any reliable analytical method to determine feedstream concentrations of metals, chlorine, and other constituents. It is your responsibility to ensure that the sampling and analysis procedures are unbiased, precise, and that the results are representative of the feedstream. For each feedstream, you must demonstrate that:

(i) Each analyte is not present above the reported level at the 80% upper confidence limit around the mean; and

V. Testing Requirements (continued)

26. 63.1208: continued

(b)(8)(ii) The analysis could have detected the presence of the constituent at or below the reported level at the 80% upper confidence limit around the mean. (See Guidance for Data Quality Assessment -- Practical Methods for Data Analysis, EPA QA/G-9, January 1998, EPA/600/R-96/084).

(9) Opacity. If you determine compliance with the opacity standard under the monitoring requirements of Sec. 63.1209(a)(1)(iv) and (a)(1)(v), you must use Method 9, provided in appendix A, part 60 of this chapter.

27. Emission Limitation: Particulate emissions from the stack shall not exceed 0.047 grains per dry standard cubic foot at seven percent oxygen, and 11.5 pounds per hour.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, particulate emissions from the stack shall not exceed 0.015 grains per dry standard cubic foot corrected to 7% oxygen, 34 mg/dscm corrected to 7% oxygen, and 8.91 pounds per hour.

Applicable Compliance Method: Compliance with the shall be determined in accordance with the stack testing requirements in Section A.V.50.

28. Emission Limitation: Particulate emissions from the stack shall not exceed 50.37 tons per year.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, particulate emissions from the stack shall not exceed 39.03 tons per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the results from the most recent stack test (pounds of particulate emissions per hour) by the total annual hours of operation, and dividing by 2000 (pounds per ton).

29. Emission Limitation: Nitrogen oxides emissions shall not exceed 158.1 pounds per hour on a rolling 24-hour average basis.

Applicable Compliance Method: Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for nitrogen oxides, provided that system meets the requirements of 40 CFR, Part 60, Appendix B, and through the record keeping requirements contained in this permit.

30. Emission Limitation: Nitrogen oxides emissions shall not exceed 196.2 tons per rolling 365-day period, except during the first 12 months of operation following the issuance of this permit, nitrogen oxides emissions shall not exceed 196.2 tons per rolling 12-month period.

Applicable Compliance Method: At the end of each day the permittee shall add (or maintain the sum of) the daily records of the hourly NOx emissions, from the previous 365-day period, as was documented by the continuous NOx monitoring system. For any period of operating time not recorded by the continuous NOx monitoring system, the average hourly emission rate from the closest period of time for which the monitor was properly operating, will be added for the missing hours of operation not recorded. While the rolling 365-day record is being established and during the first 12 months of operation, following the issuance of this permit, the NOx emissions shall be maintained as a rolling 12-month record, using the existing records from the previous 11 months.

31. Emission Limitation: Sulfur dioxide emissions shall not exceed 15.1 pounds per hour.

Applicable Compliance Method: Compliance shall be determined by emissions testing as required in Section A.V.50.b, using U.S. EPA Method 6C, and in accordance with OAC rule 3745-18-04(A). If required, and following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 6C shall be used to demonstrate compliance.

V. Testing Requirements (continued)

32. Emission Limitation: Sulfur dioxide emissions shall not exceed 66.14 tons per year.

Applicable Compliance Method: This limit was set at the potential of the unit by multiplying the allowable hourly emissions limit (15.1 lbs/hr) by the maximum possible operating hours (8760 hours/yr), and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit is also met. In order to accurately report annual emissions, the actual hours of operation and the pound per hour results from the most recent stack test may be used to calculate emissions for reporting requirements.

33. Emission Limitation: Carbon monoxide emissions shall not exceed 41.0 pounds per hour.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, carbon monoxide emissions shall not exceed 100 ppm by volume, over an hourly rolling average, on a dry basis, and corrected to 7% oxygen; and 32.76 pounds per hour

Applicable Compliance Method: Compliance shall be determined by operating the CEMS for carbon monoxide, provided that system meets the requirements of 40 CFR, Part 60, Appendix B, and through the record keeping requirements contained in this permit. If required by the Ohio EPA, U.S. EPA Method 10 testing shall be conducted in order to demonstrate compliance.

34. Emission Limitation: Carbon monoxide emissions shall not exceed 179.6 tons per year.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, carbon monoxide emissions shall not exceed 143.5 tons per year.

Applicable Compliance Method: At the end of each year the permittee shall add the daily (or if totaled monthly) records of the sum of each hourly record of CO emissions, as was documented by the continuous CO monitoring system. For any period of operating time not recorded by the continuous CO monitoring system, the average hourly emission rate from the closest period of time for which the monitor was properly operating, will be added for the missing hours of operation not recorded.

35. Emission Limitation: Hydrocarbon emissions shall not exceed 5.15 pounds per hour.

In addition, following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, hydrocarbon emissions shall not exceed 10 ppm by volume, over an hourly rolling average, on a dry basis, corrected to 7% oxygen, reported as propane.

Applicable Compliance Method: Prior to the compliance date of the interim standards for 40 CFR 63, Subpart EEE and if required by the Ohio EPA, compliance shall be determined through emissions testing, using U.S. EPA Method 25 or 25A. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 25 or 25A shall be used to demonstrate compliance, as required in Section A.V.50.

36. Emission Limitation: Hydrocarbon emissions shall not exceed 22.56 tons per year.

Applicable Compliance Method: This limit was set at the potential of the unit by multiplying the allowable hourly emissions limit by the maximum possible operating hours (8760 hours/yr), and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit is also met. In order to accurately report annual emissions, the actual hours of operation and the pound per hour results from the most recent stack test may be used to calculate emissions for reporting requirements.

37. Emission Limitation: Lead emissions shall not exceed 11.5 pounds per hour.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, lead (Pb) and cadmium (Cd) emissions together shall not exceed 240 ug/dscm, corrected to 7% oxygen, and 0.063 pound per hour, together (Cd & Pb).

Applicable Compliance Method: Compliance shall be determined through emissions testing, using U.S. EPA Method 29, as required in Section A.V.50. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 29 shall be used to demonstrate compliance with the combined limit for Cd and Pb.

V. Testing Requirements (continued)

38. Emission Limitation: Lead emissions shall not exceed 0.76 ton per quarter.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Pb and Cd emissions together shall not exceed 0.069 ton per quarter.

Applicable Compliance Method: Compliance shall be determined by multiplying the average hourly emissions of Pb, as determined from the most recent Method 29 stack test results, by the total hours of operation during each quarter, and dividing by 2000 (lbs/ton).

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance shall be determined by multiplying the average hourly emissions of Pb and Cd, as determined from the most recent Method 29 stack test results, by the total quarterly hours of operation, and dividing by 2000 (lbs/ton).

39. Emission Limitation: Lead emissions shall not exceed 3.0 tons per year.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Pb and Cd emissions together shall not exceed 0.276 ton per year.

Applicable Compliance Method: Continuous compliance with the quarterly lead emission limitation shall demonstrate compliance with the annual lead emission limitation.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance shall be determined by multiplying the average hourly emissions of Pb and Cd, as determined from the most recent Method 29 stack test results, by the total annual hours of operation, and dividing by 2000 (lbs/ton).

40. Emission Limitation: Hydrochloric acid and chlorine gas emissions combined, expressed as hydrochloric acid equivalents, shall not exceed 32.89 pounds per hour.

In addition, following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, hydrochloric acid and chlorine gas emissions, combined, expressed as hydrochloric acid equivalents, shall not exceed 77 ppm by volume, combined, and on a dry basis, corrected to 7% oxygen.

Applicable Compliance Method: Compliance shall be determined through emissions testing using U.S. EPA Methods 26A, 320 and/or 321 as required in Section A.V.50.

41. Emission Limitation: Hydrochloric acid and chlorine gas emissions combined shall not exceed 144.07 tons/year.

Applicable Compliance Method: This limit was set at the potential of the unit by multiplying the allowable hourly emissions limit by the maximum possible operating hours (8760 hours/yr), and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit is also met. In order to accurately report annual emissions, the actual hours of operation and the pound per hour results from the most recent stack test may be used to calculate emissions for reporting requirements.

42. Emission Limitation: Mercury emissions shall not exceed 1.85 pounds per hour on a rolling 24-hour average basis.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, mercury emissions shall not exceed 130 ug/dscm corrected to 7% oxygen, and 0.034 pound/hour.

Applicable Compliance Method: Compliance shall be determined through emissions testing as required in Section A.V.50, using U.S. EPA Method 29.

43. Emission Limitation: Mercury emissions shall not exceed 1.13 tons per year.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Mercury emissions shall not exceed 0.149 ton per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the hourly emissions, as determined from the most recent Method 29 stack testing results, by the total annual hours of operation, and dividing by 2000 (lbs/ton).

V. Testing Requirements (continued)

44. Emission Limitation: Beryllium emissions shall not exceed 10 grams per 24 hour period and 0.004 ton per year.

In addition, following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, arsenic (As), beryllium (Be) and chromium (Cr) emissions together shall not exceed 97 ug/dscm, corrected to 7% oxygen, and 0.025 pound per hour, together (As, Be, Cr).

Applicable Compliance Method: Compliance shall be determined by emissions testing, using U.S. EPA Method 29, as required in Section A.V.50 and converting the Be testing results to the equivalent of grams per 24 hours. The limit of 0.004 ton of Be per year is the potential of the unit, calculated by multiplying the 24 hour Be limit (from 40 CFR 61, Subpart C) by 365 days of operation per year and using the appropriate conversion factors (454 grams/lb and by 2000 lbs/ton). Therefore, provided that compliance with the gram per 24 hour limit is met, compliance with the annual limit is also met. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 29 shall also be used to demonstrate compliance with the combined limit for As, Be, and Cr.

45. Emission Limitation: Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, As, Be, and Cr emissions together shall not exceed 0.110 ton/year.

Applicable Compliance Method: Compliance shall be determined by multiplying the hourly emissions of As, Be, and Cr together, as determined from the most recent Method 29 testing results, by the by total annual hours of operation, and dividing by 2000 (lbs/ton).

46. Emission Limitation: Dioxin and furan emissions shall not exceed 2 ng TEQ/dscm at seven percent oxygen.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, dioxins and furans emissions shall not exceed 0.40 ng TEQ/dscm, corrected to 7 % oxygen and 1.049 x 10-7 lb/hr.

Applicable Compliance Method: Compliance shall be determined through emissions testing as required in Section A.V.50, using U.S. EPA Method 23A.

47. Emission Limitation: Dioxin and furan emissions shall not 2.3 x 10 -6 ton per year.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, dioxin and furan emissions shall not exceed 4.6 x 10 -7 ton/year.

Applicable Compliance Method: Compliance shall be determined by multiplying the hourly emissions of dioxin and furan, as determined from the most recent Method 23A testing results, by the total annual hours of operation, and dividing by 2000 (lbs/ton).

48. Emission Limitation: Visible emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC Rule 3745-17-03(B)(1), conducted at the frequency and as required in Section A.III.51; or the permittee may demonstrate compliance by installing a continuous opacity monitor.

49. Emission Limitation: The incinerator system shall achieve a destruction and removal efficiency of 99.99% for each selected principal organic hazardous constituent (POHC).

Applicable Compliance Method: Compliance shall be determined by emissions testing, using the appropriate U.S. EPA Methods, as required in Section A.V.50. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance shall be determined through the stack testing requirements found in Section A.V.50, using the appropriate approved U.S. EPA method for each selected POHC.

V. Testing Requirements (continued)

50. Stack Test Requirements

The permittee shall conduct, or have conducted, emission testing for emissions unit N001 in accordance with the following requirements:

a. Stack testing shall be conducted as follows:

i. Emission testing, to demonstrate compliance with the current (prior to 9/30/03) BAT limits, shall be conducted within 90 days after the issuance of PTI 02-10853.

ii. In order to demonstrate compliance with the interim standards of 40 CFR 63.1203, the permittee shall conduct an initial comprehensive performance test, not later than six months after the compliance date of 9/30/03, unless:

(a) previous emission test data, which was initiated after 54 months prior to the compliance date, serves as documentation of conformance with the emissions standards of the subpart;

(b) the results meet quality assurance, such that the results demonstrate compliance with the applicable standards of the subpart; and

(c) the testing conditions meets any additional requirements of the standard.

iii. In order to demonstrate compliance with the final rule, 40 CFR 63 Subpart EEE, and following its promulgation, the following testing shall also be conducted:

(a) Comprehensive performance testing* must be conducted to demonstrate compliance with the emission standards set forth in Section 63.1203, establish limits for the operating parameters provided in Section 63.1209, and demonstrate compliance with the performance specifications for continuous monitoring systems. Testing shall commence no later than 61 months after the date of commencing the previous comprehensive performance test. If data have been submitted in lieu of the initial performance test, the permittee must commence the subsequent comprehensive performance test within 61 months of commencing the test used to provide the data in lieu of the initial performance test.

(b) Confirmatory performance testing* must be conducted to demonstrate compliance with the emission standards for dioxin and furan, as set forth in Section 63.1203. Confirmatory performance testing shall be conducted no later than 31 months after the date of commencing the previous comprehensive performance test. If data have been submitted in lieu of the initial performance test, the permittee must commence the initial confirmatory performance test within 31 months of the date six months after the compliance date. The confirmatory performance test shall be conducted approximately midway between comprehensive performance tests.

* The required testing specifications above may be modified with any changes to the final rule, 40 CFR 63, Subpart EEE, upon its promulgation. Only an initial comprehensive performance test is required under the interim standards, as described in 40 CFR 63.1207(d)(4); and the comprehensive and confirmatory performance testing shall not be required until the final rule is promulgated.

iv. If required, additional testing may be requested by the Ohio EPA Northeast District office.

V. Testing Requirements (continued)

b. Within 90 days following the issuance of PTI 02-10853, emission testing shall be conducted to demonstrate compliance with the BAT limits for particulate emissions, sulfur dioxide, hydrochloric acid and chlorine gas, lead, mercury, beryllium, dioxin and furans, and the destruction and removal efficiency requirement for selected POHC(s).

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the emission testing shall be conducted to demonstrate compliance with the allowable emission rates for particulate emissions; lead and cadmium; hydrochloric acid and chlorine gas; mercury; arsenic, beryllium, and chromium; hydrocarbons; dioxin and furans; and the destruction and removal efficiency requirement for selected POHC(s). Compliance shall be documented based on the arithmetic average of the emissions results of each run. The destruction and removal efficiency standard must be met for each run of the performance test. During the test runs, the permittee shall establish the following operating parameters, which shall be maintained as required by the terms of this permit, after compliance has been demonstrated and upon receipt of the testing results:

i. the minimum temperature in the kiln and in main combustion chamber;

ii. the minimum water flow rate and the maximum flue gas flowrate; or the minimum liquid to gas ratio in the radial-flow venturi scrubber;

iii. minimum pressure drop across the radial-flow venturi scrubber;

iv. the maximum solids content of the radial-flow venturi and packed bed scrubbers; or the minimum blowdown rate and either the minimum scrubber tank volume or minimum liquid level;

v. the minimum pH of the scrubber liquor in gas-liquid contactor;

vi. the minimum liquid feed pressure to the packed bed scrubber;

vii. the maximum flue gas flowrate and/or maximum production/process weight rate;

viii. the maximum waste feed rate, not to exceed 24,000 pounds per hour; and,

V. Testing Requirements (continued)

ix. the minimum power input to each TR set of the WESP(s) (or other parameter required per the final rule).

c. The following test method(s) from 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 5 for particulate emissions;
Method 6C for S02;
Method 25 or 25A for hydrocarbons;
Methods 26A, 320, or 321 for hydrochloric acid and chlorine gas;
Method 29 for lead and cadmium;
Method 29 for arsenic, beryllium, and chromium;
Method 29 for mercury;
Method 0023A and for dioxin and furan; and the appropriate approved U.S. EPA method for each selected POHC

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 Ohio EPA Northeast District Office.

e. In order to demonstrate compliance with the destruction and removal efficiency requirement for POHC, the following equation shall be calculated:

DRE = [1 - (Wout/Win) x 100%]

where:

Win = mass feedrate of selected POHC in a waste feedstream
Wout = mass emission rate of the same POHC present in exhaust emissions

The permittee shall submit to the Ohio EPA Northeast District Office a test methodology for each selected POHC which will be burned in the incinerator, as well as each site-specific test plan and CMS performance evaluation test plan as required in reporting requirement 28 for any comprehensive and confirmatory performance test; and as required in testing requirements 50, prior to the effective date of the interim standards of 40 CFR 63, Subpart EEE.

f. The permittee shall record the weight, in pounds, of all liquid, semi-solid, and solid waste charged during the stack test(s).

g. In addition to the notification requirements of the interim standards of 40 CFR 63, Subpart EEE, the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office not later than 30 days prior to each proposed compliance test date. 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 Northeast District Office's. refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast District Office 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 (i.e. stack test contractor) and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s).

51. The frequency of stack testing and test methods conducted shall be determined with the promulgation of 40 CFR 63, Subpart EEE, the final rule, or as required by any other applicable regulation. The Notification of Compliance shall be submitted following each subsequent comprehensive and confirmatory performance test as required in 40 CFR 63.1210 (b).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 23 (T018)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 23 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived directly from Subpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 24 (T019)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 24 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 25 (T020)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 25 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 26 (T021)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 26 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 27 (T022)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 27 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 28 (T023)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 28 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 29 (T024)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 29 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 30 (T025)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 30 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 31 (T026)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 31 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 32 (T027)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 32 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 33 (T028)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 33 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 34 (T029)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 34 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 35 (T030)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 35 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tank 36 (T031)

Activity Description: Tank Farm 1 - 9,920 gallon storage tank for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 36 - 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 19-088	See Additional Terms and Conditions A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived fromSubpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage/Treatment Tank 70 (T035)

Activity Description: 10,000 gallon condensation tank used as part of liquid vacuum system, vented to vapor recovery unit

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 70 - 10000-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05 (A)(3) PTI 02-3263	Summation of organic compound emissions from T035, T036, and T037 shall not exceed 19.8 pounds per day. See Additional Terms and Conditions A.I.2.a The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived directly from Subpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

2. Emission Limitation: Summation of organic compound emissions from T035, T036, and T037 shall not exceed 19.8 pounds per day.

Applicable Compliance Method: Emissions shall be determined by using the following equation:

E = F x C where

E = emission rate (pounds per day)

F = removal efficiency of control unit

C = emissions unit uncontrolled emissions rate (pounds per day). The uncontrolled emissions rate shall be determined by using an Ohio EPA approved calculation method.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage/Treatment Tank 73 (T036)

Activity Description: 7,500 gallon vacuum tank used as part of liquid vacuum system, vented to Tank 70

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 73 - 10000-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05 (A)(3) PTI 02-3263	Summation of organic compound emissions from T035, T036, and T037 shall not exceed 19.8 pounds per day. See Additional Terms and Conditions A.I.2.a The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived directly from Subpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

2. Emission Limitation: Summation of organic compound emissions from T035, T036, and T037 shall not exceed 19.8 pounds per day.

Applicable Compliance Method: Emissions shall be determined by using the following equation:

E = F x C where

E = emission rate (pounds per day)

F = removal efficiency of control unit

C = emissions unit uncontrolled emissions rate (pounds per day). The uncontrolled emissions rate shall be determined by using an Ohio EPA approved calculation method.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage/Treatment Tank 74 (T037)

Activity Description: 7,500 gallon vacuum tank used as part of liquid vacuum system, vented to Tank 70

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tank # 74 - 10000-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05 (A)(3) PTI 02-3263	Summation of organic compound emissions from T035, T036, and T037 shall not exceed 19.8 pounds per day. See Additional Terms and Conditions A.I.2.a The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through section 63.697 located in Part II of this permit. Note: The terms and conditions derived directly from Subpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through section 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

2. Emission Limitation: Summation of organic compound emissions from T035, T036, and T037 shall not exceed 19.8 pounds per day.

Applicable Compliance Method: Emissions shall be determined by using the following equation:

E = F x C where

E = emission rate (pounds per day)

F = removal efficiency of control unit

C = emissions unit uncontrolled emissions rate (pounds per day). The uncontrolled emissions rate shall be determined by using an Ohio EPA approved calculation method.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tanks 37 - 50 (T039)

Activity Description: Tank Farm II - Fourteen (14) 9,920 gallon storage tanks for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tanks # 37 through # 50, each is a 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 02-2237	The summation of totla hydrocarbon emissions from T039 and T040 shall not exceed 1.24 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through 63.697 located in Part II of this permit. Note: The terms and conditions derived directly from Subpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 3, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

2. Emission Limitation: The summation of totla hydrocarbon emissions from T039 and T040 shall not exceed 1.24 tons per year.

Applicable Compliance Method: Emissions shall be determined by the following equation:

E = F x C where

E = emission rate (tons per year)

F = removal efficency of control unit

C = emissions unit uncontrolled emissions rate (tons per year) The uncontrolled emissions rate shall be determined by using an Ohio EPA approved calculation method.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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 - Terms and Conditions for Emissions Units

Emissions Unit ID: Storage Tanks 51 - 64 (T040)

Activity Description: Tank Farm III - Fourteen (14) 9,920 gallon storage tanks for liquid wastes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Storage tanks # 51 through # 64, each is a 9920-gallon fixed roof, vertical, steel tank for storage of liquid waste (Tank air emissions are vented to a dual stage condenser and a carbon adsorption unit is series.)	OAC rule 3745-31-05(A)(3) PTI 02-2237	The summation of totla hydrocarbon emissions from T039 and T040 shall not exceed 1.24 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(2).
	OAC rule 3745-21-07(D)(2)	Storage tank shall be equipped with a permanent submerged fill pipe.
	40 CFR 63, Subpart DD (MACT for Off-Site Waste and Recovery Operations)	See applicable references to section 63.683 through 63.697 located in Part II of this permit. Note: The terms and conditions derived directly from Subpart DD are structured similar to the applicable standard as of July 1, 2001.

2. Additional Terms and Conditions

2.a All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 3, Subpart DD.

II. Operational Restrictions

1. See applicable references to section 63.683 through 63.697 located in Part II of this permit.

III. Monitoring and/or Record Keeping Requirements

1. See applicable references to section 63.683 through 63.697 located in Part II of this permit.

IV. Reporting Requirements

1. See applicable references to section 63.683 through 63.697 located in Part II of this permit.

V. Testing Requirements

1. Emission Limitation: All vapors from this emissions unit shall be vented to a control system with a control efficiency of at least 80%. Note: This requirement taken from the PTI is less stringent than the requirements established in 40 CFR, Part 63, Subpart DD.

Applicable Compliance Method: If required, the permittee shall perform Method 1-4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

2. Emission Limitation: The summation of totla hydrocarbon emissions from T039 and T040 shall not exceed 1.24 tons per year.

Applicable Compliance Method: Emissions shall be determined by the following equation:

E = F x C where

E = emission rate (tons per year)

F = removal efficency of control unit

C = emissions unit uncontrolled emissions rate (tons per year) The uncontrolled emissions rate shall be determined by using an Ohio EPA approved calculation method.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/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

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