



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

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

Mailing Address:

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

06/11/08

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

04-48-01-0466
Crown Cork & Seal
John Kupa Mr.
5201 Enterprise Blvd
Toledo, OH 43612

Dear John Kupa:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 02/21/08. The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

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

**Andrew Hall
Permit Review/Development Section
Ohio EPA, Division of Air Pollution Control
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43215**

and

Toledo Div of Environmental Services
348 South Erie Street
Toledo, OH 43604
(419) 936-3015

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

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

Sincerely,


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

cc: Toledo Div of Environmental Services
File, DAPC PIER



State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 06/11/08

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 04-48-01-0466 to:

Crown Cork & Seal
5201 Enterprise Blvd
Toledo, OH 43612

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

B004 (Paint line Steam Boiler) Provides hot water for wet section of 66 in coating line	K004 (2nd coater - 36 inch coil coating line (South Coater)) An additional coater and oven was installed in the existing 36 inch coil coating line	36 inch coil coating line with oven and catalytic incinerator installed under PTI 04-01277
K001 (66 inch coil coating line) Aluminum coil coating line	K005 (36 inch coil coating line (North Coater))	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Toledo Div of Environmental Services
348 South Erie Street
Toledo, OH 43604
(419) 936-3015

Ohio Environmental Protection Agency

Chris Korleski
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c. The permittee shall submit required reports in the following manner:
- i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter. (An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).)

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

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those

reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

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

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

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

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

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

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

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

See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

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

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; General Terms and Conditions: A.2, A.3, A.4, A.6.e, A.7, A.12, A.14, A.18, A.19, A.20, and A.22 of Part I of this Title V permit, as well as any deviations from the requirements in Section A.V or A.VI of Part III of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by

permit or rule for the insignificant activities or emissions levels (IEU) identified in Part II.A of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

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

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

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

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

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

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Risk Management Plans

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

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f. Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable upon final issuance of all applicable OAC Chapter 3745-35 operating permits and/or registrations for all subject emissions units located at the facility and:
 - i. the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - ii. the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - iii. a combination of i. and ii. above.

The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(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 (i.e., postmarked) 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 emissions 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.

(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 or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Permanent Shutdown of an Emissions Unit

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

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

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

(Authority for term: OAC rule 3745-77-01)

22. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

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 (i.e., postmarked) quarterly, 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 emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

- a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii; or
- b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. Subpart SSSS—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil

§ 63.5080 What is in this subpart?

This subpart describes the actions you must take to reduce emissions of hazardous air pollutants (HAP) if you own or operate a facility that performs metal coil surface coating operations and is a major source of HAP. This subpart establishes emission standards and states what you must do to comply. Certain requirements apply to all who must comply with the subpart; others depend on the means you use to comply with an emission standard.

2. § 63.5090 Does this subpart apply to me?

(a) The provisions of this subpart apply to each facility that is a major source of HAP, as defined in §63.2, at which a coil coating line is operated, except as provided in paragraph (b) of this section.

(b) This subpart does not apply to any coil coating line that meets the criteria of paragraph (b)(1) or (2) of this section.

(1) A coil coating line that is part of research or laboratory equipment.

(2) A coil coating line on which at least 85 percent of the metal coil coated, based on surface area, is less than 0.15 millimeter (0.006 inch) thick, except as provided in paragraph (c) of this section.

(c) If you operate a coating line subject to subpart JJJJ of this part that also meets the criteria in either paragraph (c)(1) or (2) of this section, and you choose to comply with the requirements of this subpart, then such compliance constitutes compliance with subpart JJJJ. The coating line for which you choose this option is, therefore, included in the affected source for this subpart as defined in §63.5110 and shall not be included in the affected source for subpart JJJJ as defined in §63.3300.

(1) The coating line is used to coat metal coil of thicknesses both less than and greater than or equal to 0.15 millimeter (0.006 inch) thick, regardless of the percentage of surface area of each thickness coated.

(2) The coating line is used to coat only metal coil that is less than 0.15 millimeter (0.006 inch) thick and the coating line is controlled by a common control device that also receives organic HAP emissions from a coil coating line that is subject to the requirements of this subpart.

(d) Each coil coating line that does not comply with the provisions of this subpart because it meets the criteria in paragraph (b)(2) of this section, that for any rolling 12-month period fails to meet the criteria in paragraph (b)(2) would from that point forward become subject to the provisions of this subpart.

A. State and Federally Enforceable Section (continued)

3. (c) If you operate a coating line subject to subpart JJJJ of this part that also meets the criteria in either paragraph (c)(1) or (2) of this section, and you choose to comply with the requirements of this subpart, then such compliance constitutes compliance with subpart JJJJ. The coating line for which you choose this option is, therefore, included in the affected source for this subpart as defined in §63.5110 and shall not be included in the affected source for subpart JJJJ as defined in §63.3300.

(1) The coating line is used to coat metal coil of thicknesses both less than and greater than or equal to 0.15 millimeter (0.006 inch) thick, regardless of the percentage of surface area of each thickness coated.

(2) The coating line is used to coat only metal coil that is less than 0.15 millimeter (0.006 inch) thick and the coating line is controlled by a common control device that also receives organic HAP emissions from a coil coating line that is subject to the requirements of this subpart.

(d) Each coil coating line that does not comply with the provisions of this subpart because it meets the criteria in paragraph (b)(2) of this section, that for any rolling 12-month period fails to meet the criteria in paragraph (b)(2) would from that point forward become subject to the provisions of this subpart. After becoming subject to the provisions of this subpart, the coil coating line would no longer be eligible to use the criteria of paragraph (b)(2) of this section, even if in subsequent 12-month periods at least 85 percent of the metal coil coated, based on surface area, is less than 0.15 millimeter (0.006 inch) thick.

4. § 63.5100 Which of my emissions sources are affected by this subpart?
The affected source subject to this subpart is the collection of all of the coil coating lines at your facility.

5. § 63.5110 What special definitions are used in this subpart?
All terms used in this subpart that are not defined in this section have the meaning given to them in the Clean Air Act (CAA) and in subpart A of this part.

Always-controlled work station means a work station associated with a curing oven from which the curing oven exhaust is delivered to a control device with no provision for the oven exhaust to bypass the control device. Sampling lines for analyzers and relief valves needed for safety purposes are not considered bypass lines.

Capture efficiency means the fraction of all organic HAP emissions generated by a process that is delivered to a control device, expressed as a percentage.

Capture system means a hood, enclosed room, or other means of collecting organic HAP emissions and conveying them to a control device.

Car-seal means a seal that is placed on a device that is used to change the position of a valve or damper (e.g., from open to closed) in such a way that the position of the valve or damper cannot be changed without breaking the seal.

A. State and Federally Enforceable Section (continued)

Coating means material applied onto or impregnated into a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, inks, adhesives, maskants, and temporary coatings. Decorative, protective, or functional materials that consist only of solvents, protective oils, acids, bases, or any combination of these substances are not considered coatings for the purposes of this subpart.

Coating material means the coating and other products (e.g., a catalyst and resin in multi-component coatings) combined to make a single material at the coating facility that is applied to metal coil. For the purposes of this subpart, an organic solvent that is used to thin a coating prior to application to the metal coil is considered a coating material.

Coil coating line means a process and the collection of equipment used to apply an organic coating to the surface of metal coil. A coil coating line includes a web unwind or feed section, a series of one or more work stations, any associated curing oven, wet section, and quench station. A coil coating line does not include ancillary operations such as mixing/thinning, cleaning, wastewater treatment, and storage of coating material.

Control device means a device such as a solvent recovery device or oxidizer which reduces the organic HAP in an exhaust gas by recovery or by destruction.

Control device efficiency means the ratio of organic HAP emissions recovered or destroyed by a control device to the total organic HAP emissions that are introduced into the control device, expressed as a percentage.

Curing oven means the device that uses heat or radiation to dry or cure the coating material applied to the metal coil.

Day means a 24-consecutive-hour period.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during start-up, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Existing affected source means an affected source the construction of which commenced on or before July 18, 2000, and it has not subsequently undergone reconstruction as defined in §63.2.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

A. State and Federally Enforceable Section (continued)

Flexible packaging means any package or part of a package the shape of which can be readily changed. Flexible packaging includes but is not limited to bags, pouches, labels, liners and wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials.

HAP applied means the organic HAP content of all coating materials applied to a substrate by a coil coating line.

Intermittently-controllable work station means a work station associated with a curing oven with provisions for the curing oven exhaust to be delivered to a control device or diverted from a control device through a bypass line, depending on the position of a valve or damper. Sampling lines for analyzers and relief valves needed for safety purposes are not considered bypass lines.

Metal coil means a continuous metal strip that is at least 0.15 millimeter (0.006 inch) thick, which is packaged in a roll or coil prior to coating. After coating, it may or may not be rewound into a roll or coil. Metal coil does not include metal webs that are coated for use in flexible packaging.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Never-controlled work station means a work station which is not equipped with provisions by which any emissions, including those in the exhaust from any associated curing oven, may be delivered to a control device.

New affected source means an affected source the construction or reconstruction of which commenced after July 18, 2000.

Overall organic HAP control efficiency means the total efficiency of a control system, determined either by:

(1) The product of the capture efficiency as determined in accordance with the requirements of §63.5160(e) and the control device efficiency as determined in accordance with the requirements of §63.5160(a)(1)(i) and (ii) or §63.5160(d); or

(2) A liquid-liquid material balance in accordance with the requirements of §63.5170(e)(1).

Permanent total enclosure (PTE) means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51 for a PTE, and that directs all the exhaust gases from the enclosure to a control device.

Protective oil means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes but is not limited to lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Research or laboratory equipment means any equipment for which the primary purpose is to conduct research and development into new processes and products, where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Temporary total enclosure (TTE) means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source, as defined in Method 204 of 40 CFR part 51, appendix M.

Work station means a unit on a coil coating line where coating material is deposited onto the metal coil substrate.

A. State and Federally Enforceable Section (continued)

6. § 63.5120 What emission standards must I meet?

(a) Each coil coating affected source must limit organic HAP emissions to the level specified in paragraph (a)(1), (2), or (3) of this section:

(1) No more than 2 percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction); or

(2) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period; or

(3) If you use an oxidizer to control organic HAP emissions, operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) on a dry basis is achieved and the efficiency of the capture system is 100 percent.

(b) You must demonstrate compliance with one of these standards by following the applicable procedures in §63.5170.

7. § 63.5121 What operating limits must I meet?

(a) Except as provided in paragraph (b) of this section, for any coil coating line for which you use an add-on control device, unless you use a solvent recovery system and conduct a liquid-liquid material balance according to §63.5170(e)(1), you must meet the applicable operating limits specified in Table 1 to this subpart. You must establish the operating limits during the performance test according to the requirements in §63.5160(d)(3). You must meet the operating limits at all times after you establish them.

(b) If you use an add-on control device other than those listed in Table 1 to this subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

8. § 63.5130 When must I comply?

(a) For an existing affected source, the compliance date is 3 years after June 10, 2002.

(b) If you own or operate a new affected source subject to the provisions of this subpart, you must comply immediately upon start-up of the affected source, or by June 10, 2002, whichever is later.

(c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources.

(d) The initial compliance period begins on the applicable compliance date specified in paragraph (a) or (b) of this section and ends on the last day of the 12th month following the compliance date. If the compliance date falls on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months.

(e) For the purpose of demonstrating continuous compliance, a compliance period consists of 12 months. Each month after the end of the initial compliance period described in paragraph (d) of this section is the end of a compliance period consisting of that month and the preceding 11 months.

9. § 63.5140 What general requirements must I meet to comply with the standards?

(a) You must be in compliance with the standards in this subpart at all times, except during periods of start-up, shutdown, and malfunction of any capture system and control device used to comply with this subpart. If you are complying with the emission standards of this subpart without the use of a capture system and control device, you must be in compliance with the standards at all times, including periods of start-up, shutdown, and malfunction.

(b) Table 2 of this subpart provides cross references to subpart A of this part, indicating the applicability of the General Provisions requirements to this subpart.

A. State and Federally Enforceable Section (continued)

- 10.** § 63.5150 If I use a control device to comply with the emission standards, what monitoring must I do?

Table 1 to § 63.5150 Control Device Monitoring Requirements Index

- 11.** (a) To demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device required to comply with §63.5120 following the date on which the initial performance test of the capture system and control device is completed. You must install and operate the monitoring equipment as specified in paragraphs (a)(1) through (4) of this section.

(1) Bypass monitoring. If you operate coil coating lines with intermittently-controllable work stations, you must follow at least one of the procedures in paragraphs (a)(1)(i) through (iv) of this section for each curing oven associated with these work stations to monitor for potential bypass of the control device:

(i) Flow control position indicator. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the curing oven is directed to the control device or is diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.

(ii) Car-seal or lock-and-key valve closures. Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration when the control device is in operation; a visual inspection of the seal or closure mechanism will be performed at least once every month to ensure that the valve or damper is maintained in the closed position, and the exhaust stream is not diverted through the bypass line.

(iii) Valve closure continuous monitoring. Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position when the control device is in operation. The monitoring system must be inspected at least once every month to verify that the monitor will indicate valve position.

(iv) Automatic shutdown system. Use an automatic shutdown system in which the coil coating line is stopped when flow is diverted away from the control device to any bypass line when the control device is in operation. The automatic shutdown system must be inspected at least once every month to verify that it will detect diversions of flow and shut down operations.

(2) Continuous emission monitoring system (CEMS). If you are demonstrating continuous compliance with the standards in §63.5120(a)(1) or (2) through continuous emission monitoring of a control device, you must install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and outlet, and you must continuously monitor flow rate. If you are demonstrating continuous compliance with the outlet organic HAP concentration limit in §63.5120(a)(3), you must install, calibrate, operate, and maintain a continuous emission monitor to measure the total organic volatile matter concentration at the control device outlet.

(i) All CEMS must comply with performance specification 8 or 9 of 40 CFR part 60, appendix B, as appropriate for the detection principle you choose. The requirements of 40 CFR part 60, procedure 1, appendix F must also be followed. In conducting the quarterly audits of the monitors as required by procedure 1, appendix F, you must use compounds representative of the gaseous emission stream being controlled.

(ii) As specified in §63.8(c)(4)(ii), each CEMS and each flow rate monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Information which must be determined for recordkeeping purposes, as required by §63.5190(a)(1)(i) includes:

A. State and Federally Enforceable Section (continued)

- A) The hourly average of all recorded readings;
- (B) The daily average of all recorded readings for each operating day; and
- (C) The monthly average for each month during the semiannual reporting period.

(3) Temperature monitoring of oxidizers. If you are complying with the requirements of the standards in §63.5120 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter, you must comply with paragraphs (a)(3)(i) through (iii) of this section.

(i) Install, calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months; or the chart recorder, data logger, or temperature indicator must be replaced. You must replace the equipment either if you choose not to perform the calibration, or if the equipment cannot be calibrated properly. Each temperature monitoring device must be equipped with a continuous recorder. The device must have an accuracy of ± 1 percent of the temperature being monitored in degrees Celsius, or ± 1 °Celsius, whichever is greater.

(ii) For an oxidizer other than a catalytic oxidizer, to demonstrate continuous compliance with the operating limit established according to §63.5160(d)(3)(i), you must install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone.

(iii) For a catalytic oxidizer, if you are demonstrating continuous compliance with the operating limit established according to §63.5160(d)(3)(ii)(A) and (B), then you must install the thermocouples or temperature sensors in the vent stream at the nearest feasible point to the inlet and outlet of the catalyst bed. Calculate the temperature difference across the catalyst. If you are demonstrating continuous compliance with the operating limit established according to §63.5160(d)(3)(ii)(C) and (D), then you must install the thermocouple or temperature sensor in the vent stream at the nearest feasible point to the inlet of the catalyst bed.

(4) Capture system monitoring. If you are complying with the requirements of the standards in §63.5120 through the use of a capture system and control device, you must develop a capture system monitoring plan containing the information specified in paragraphs (a)(4)(i) and (ii) of this section. You must monitor the capture system in accordance with paragraph (a)(4)(iii) of this section. You must make the monitoring plan available for inspection by the permitting authority upon request.

i) The monitoring plan must identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained, explain why this parameter is appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures.

(ii) The plan also must specify operating limits at the capture system operating parameter value, or range of values, that demonstrates compliance with the standards in §63.5120. The operating limits must represent the conditions indicative of proper operation and maintenance of the capture system.

(iii) You must conduct monitoring in accordance with the plan.

(b) Any deviation from the required operating parameters which are monitored in accordance with paragraphs (a)(3) and (4) of this section, unless otherwise excused, will be considered a deviation from the operating limit.

12. § 63.5160 What performance tests must I complete?

Table 1 to § 63.5160 Required Performance Testing Summary

A. State and Federally Enforceable Section (continued)

(a) If you use a control device to comply with the requirements of §63.5120, you are not required to conduct a performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through (3) of this section are met:

(1) The control device is equipped with continuous emission monitors for determining total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart; and the continuous emission monitors are used to demonstrate continuous compliance in accordance with §63.5150(a)(2); or

(2) You have received a waiver of performance testing under §63.7(h); or

(3) The control device is a solvent recovery system and you choose to comply by means of a monthly liquid-liquid material balance.

(b) Organic HAP content. You must determine the organic HAP weight fraction of each coating material applied by following one of the procedures in paragraphs (b)(1) through (4) of this section:

(1) Method 311. You may test the material in accordance with Method 311 of appendix A of this part. The Method 311 determination may be performed by the manufacturer of the material and the results provided to you. The organic HAP content must be calculated according to the criteria and procedures in paragraphs (b)(1)(i) through (iii) of this section.

i) Count only those organic HAP that are measured to be present at greater than or equal to 0.1 weight percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 weight percent for other organic HAP compounds.

(ii) Express the weight fraction of each organic HAP you count according to paragraph (b)(1)(i) of this section as a value truncated to four places after the decimal point (for example, 0.3791).

(iii) Calculate the total weight fraction of organic HAP in the tested material by summing the counted individual organic HAP weight fractions and truncating the result to three places after the decimal point (for example, 0.763).

(2) Method 24. For coatings, you may determine the total volatile matter content as weight fraction of nonaqueous volatile matter and use it as a substitute for organic HAP, using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to you.

(3) Alternative method. You may use an alternative test method for determining the organic HAP weight fraction once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(4) Formulation data. You may use formulation data provided that the information represents each organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used, weighted by the mass fraction of each raw material used in the material. Formulation data may be provided to you by the manufacturer of the coating material. In the event of any inconsistency between test data obtained with the test methods specified in paragraphs (b)(1) through (3) of this section and formulation data, the test data will govern.

A. State and Federally Enforceable Section (continued)

(c) Solids content. You must determine the solids content of each coating material applied. You may determine the volume solids content using ASTM D2697–86 (Reapproved 1998) or ASTM D6093–97 (incorporated by reference, see §63.14), or an EPA approved alternative method. The ASTM D2697–86 (Reapproved 1998) or ASTM D6093–97 determination may be performed by the manufacturer of the material and the results provided to you. Alternatively, you may rely on formulation data provided by material providers to determine the volume solids.

(d) Control device destruction or removal efficiency. If you are using an add-on control device, such as an oxidizer, to comply with the standard in §63.5120, you must conduct a performance test to establish the destruction or removal efficiency of the control device or the outlet HAP concentration achieved by the oxidizer, according to the methods and procedures in paragraphs (d)(1) and (2) of this section. During the performance test, you must establish the operating limits required by §63.5121 according to paragraph (d)(3) of this section.

(1) An initial performance test to establish the destruction or removal efficiency of the control device must be conducted such that control device inlet and outlet testing is conducted simultaneously. To establish the outlet organic HAP concentration achieved by the oxidizer, only oxidizer outlet testing must be conducted. The data must be reduced in accordance with the test methods and procedures in paragraphs (d)(1)(i) through (ix).

(i) Method 1 or 1A of 40 CFR part 60, appendix A, is used for sample and velocity traverses to determine sampling locations.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, is used to determine gas volumetric flow rate.

(iii) Method 3, 3A, or 3B of 40 CFR part 60, appendix A, used for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses” (incorporated by reference, see §63.14).

(iv) Method 4 of 40 CFR part 60, appendix A, is used to determine stack gas moisture.

(v) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run, as specified in paragraph (d)(1)(vii) of this section.

(vi) Method 25 or 25A of 40 CFR part 60, appendix A, is used to determine total gaseous non-methane organic matter concentration. Use the same test method for both the inlet and outlet measurements, which must be conducted simultaneously. You must submit notification of the intended test method to the Administrator for approval along with notification of the performance test required under §63.7 (b). You must use Method 25A if any of the conditions described in paragraphs (d)(1)(vi)(A) through (D) of this section apply to the control device.

(A) The control device is not an oxidizer.

(B) The control device is an oxidizer, but an exhaust gas volatile organic matter concentration of 50 ppmv or less is required to comply with the standards in §63.5120; or

A. State and Federally Enforceable Section (continued)

(C) The control device is an oxidizer, but the volatile organic matter concentration at the inlet to the control system and the required level of control are such that they result in exhaust gas volatile organic matter concentrations of 50 ppmv or less; or

(D) The control device is an oxidizer, but because of the high efficiency of the control device, the anticipated volatile organic matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.

(vii) Each performance test must consist of three separate runs, except as provided by §63.7(e)(3); each run must be conducted for at least 1 hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining volatile organic matter concentrations and mass flow rates, the average of the results of all runs will apply. If you are demonstrating initial compliance with the outlet organic HAP concentration limit in §63.5120(a)(3), only the average outlet volatile organic matter concentration must be determined.

(viii) If you are determining the control device destruction or removal efficiency, for each run, determine the volatile organic matter mass flow rates using Equation 1 of this section:

Where:

$$M(f) = Q(sd)C(c)(12)(0.416)(10^{-6})$$

M(f)=total organic volatile matter mass flow rate, kg/per hour (h).

C(c)=concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, ppmv, dry basis.

Q(sd)=volumetric flow rate of gases entering or exiting the control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters (dscm)/h.

0.0416=conversion factor for molar volume, kg-moles per cubic meter (mol/m³) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(ix) For each run, determine the control device destruction or removal efficiency, DRE, using Equation 2 of this section:

$$DRE = \frac{M(fi) - M(fo)}{M(fi)} \times 100$$

A. State and Federally Enforceable Section (continued)

Where:

DRE=organic emissions destruction or removal efficiency of the add-on control device, percent.

Mfi=organic volatile matter mass flow rate at the inlet to the control device, kg/h.

Mfo=organic volatile matter mass flow rate at the outlet of the control device, kg/h.

(x) The control device destruction or removal efficiency is determined as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

(2) You must record such process information as may be necessary to determine the conditions in existence at the time of the performance test. Operations during periods of start-up, shutdown, and malfunction will not constitute representative conditions for the purpose of a performance test.

(3) Operating limits. If you are using a capture system and add-on control device other than a solvent recovery system for which you conduct a liquid-liquid material balance to comply with the requirements in §63.5120, you must establish the applicable operating limits required by §63.5121. These operating limits apply to each capture system and to each add-on emission control device that is not monitored by CEMS, and you must establish the operating limits during the performance test required by paragraph (d) of this section according to the requirements in paragraphs (d)(3)(i) through (iii) of this section.

(i) Thermal oxidizer. If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (d)(3)(i)(A) and (B) of this section.

A) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(B) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(ii) Catalytic oxidizer. If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (d)(3)(ii)(A) and (B) or paragraphs (d)(3)(ii)(C) and (D) of this section.

(A) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(B) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

A. State and Federally Enforceable Section (continued)

(C) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (d)(3)(ii)(D) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(D) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (d)(3)(ii)(C) of this section. The plan must address, at a minimum, the elements specified in paragraphs (d)(3)(ii)(D)(1) (3) of this section.

(1) Annual sampling and analysis of the catalyst activity (i.e., conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures.

(2) Monthly inspection of the oxidizer system including the burner assembly and fuel supply lines for problems and,

(3) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must take corrective action consistent with the manufacturer's recommendations and conduct a new performance test to determine destruction efficiency according to §63.5160.

(iii) Other types of control devices. If you use a control device other than an oxidizer or a solvent recovery system for which you choose to comply by means of a monthly liquid-liquid material balance, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

(e) Capture efficiency. If you are required to determine capture efficiency to meet the requirements of §63.5170(e)(2), (f)(1) through (2), (h)(2) through (4), or (i)(2) through (3), you must determine capture efficiency using the procedures in paragraph (e)(1), (2), or (3) of this section, as applicable.

(1) For an enclosure that meets the criteria for a PTE, you may assume it achieves 100 percent capture efficiency. You must confirm that your capture system is a PTE by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR part 51, appendix M (or an EPA approved alternative method), and that all exhaust gases from the enclosure are delivered to a control device.

(2) You may determine capture efficiency, CE, according to the protocols for testing with temporary total enclosures that are specified in Method 204A through F of 40 CFR part 51, appendix M. You may exclude never-controlled work stations from such capture efficiency determinations.

(3) As an alternative to the procedures specified in paragraphs (e)(1) and (2) of this section, if you are required to conduct a capture efficiency test, you may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in appendix A to subpart KK of this part. You may exclude never-controlled work stations from such capture efficiency determinations.

A. State and Federally Enforceable Section (continued)

Requirements for Showing Compliance

§ 63.5170 How do I demonstrate compliance with the standards?

You must include all coating materials (as defined in §63.5110) used in the affected source when determining compliance with the applicable emission limit in §63.5120. To make this determination, you must use at least one of the four compliance options listed in Table 1 of this section. You may apply any of the compliance options to an individual coil coating line, or to multiple lines as a group, or to the entire affected source. You may use different compliance options for different coil coating lines, or at different times on the same line. However, you may not use different compliance options at the same time on the same coil coating line. If you switch between compliance options for any coil coating line or group of lines, you must document this switch as required by §63.5190(a), and you must report it in the next semiannual compliance report required in §63.5180.

Table 1 to § 63.5170 Compliance Demonstration Requirements Index

(a) As-purchased compliant coatings. If you elect to use coatings that individually meet the organic HAP emission limit in §63.5120(a)(2) as-purchased, to which you will not add HAP during distribution or application, you must demonstrate that each coating material applied during the 12-month compliance period contains no more than 0.046 kg HAP per liter of solids on an as-purchased basis.

(1) Determine the organic HAP content for each coating material in accordance with §63.5160(b) and the volume solids content in accordance with §63.5160(c).

(2) Combine these results using Equation 1 of this section and compare the result to the organic HAP emission limit in §63.5120(a)(2) to demonstrate that each coating material contains no more organic HAP than the limit.

$$H(\text{siap}) = [C(\text{hi})D(\text{j})]/(V(\text{si}))$$

Where:

$H(\text{siap})$ = as-purchased, organic HAP to solids ratio of coating material, i, kg organic HAP/liter solids applied.

$C(\text{hi})$ = organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg.

$D(\text{i})$ = density of coating material, i, kg/l.

$V(\text{si})$ = volume fraction of solids in coating, i, l/l.

(b) As-applied compliant coatings. If you choose to use “as-applied” compliant coatings, you must demonstrate that the average of each coating material applied during the 12-month compliance period contains no more than 0.046 kg of organic HAP per liter of solids applied in accordance with (b)(1) of this section, or demonstrate that the average of all coating materials applied during the 12-month compliance period contain no more than 0.046 kg of organic HAP per liter of solids applied in accordance with paragraph (b)(2) of this section.

(1) To demonstrate that the average organic HAP content on the basis of solids applied for each coating material applied, HSi_{yr} , is less than 0.046 kg HAP per liter solids applied for the 12-month compliance period, use Equation 2 of this section found in 63.5170(1) of this subpart.

None

A. State and Federally Enforceable Section (continued)

Where:

Hsi yr = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of material, i, kg organic HAP/liter solids applied.

Vi = volume of coating material, i, l.

Di = density of coating material, i, kg/l.

Cahi = monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kilogram (kg)/kg.

Vj = volume of solvent, j, l.

Dj = density of solvent, j, kg/l.

Chij = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

Vsi = volume fraction of solids in coating, i, l/l.

y = identifier for months.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(2) To demonstrate that the average organic HAP content on the basis of solids applied, HS yr, of all coating materials applied is less than 0.046 kg HAP per liter solids applied for the 12-month compliance period, use Equation 3 of section 63.5170(2) in this subpart

Where:

HS yr = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of all materials applied, kg organic HAP/liter solids applied.

Vi = volume of coating material, i, l.

Di = density of coating material, i, kg/l.

Cahi = monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kilogram (kg)/kg.

Vj = volume of solvent, j, l.

Dj = density of solvent, j, kg/l.

Chij = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

Vsi = volume fraction of solids in coating, i, l/l.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

y = identifier for months.

A. State and Federally Enforceable Section (continued)

(c) Capture and control to reduce emissions to no more than the allowable limit. If you use one or more capture systems and one or more control devices and demonstrate an average overall organic HAP control efficiency of at least 98 percent for each month to comply with §63.5120(a)(1); or operate a capture system and oxidizer so that the capture efficiency is 100 percent and the oxidizer outlet HAP concentration is no greater than 20 ppmv on a dry basis to comply with §63.5120(a)(3), you must follow one of the procedures in paragraphs (c)(1) through (4) of this section. Alternatively, you may demonstrate compliance for an individual coil coating line by operating its capture system and control device and continuous parameter monitoring system according to the procedures in paragraph (i) of this section.

(1) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in §63.5120(a)(1) or (2) and has only always-controlled work stations, then you must demonstrate compliance with the provisions of paragraph (e) of this section when emissions from the affected source are controlled by one or more solvent recovery devices.

(2) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in §63.5120(a)(1) or (2) and has only always-controlled work stations, then you must demonstrate compliance with the provisions of paragraph (f) of this section when emissions are controlled by one or more oxidizers.

(3) If the affected source operates both solvent recovery and oxidizer control devices, one or more never-controlled work stations, or one or more intermittently-controllable work stations, or uses more than one compliance procedure, then you must demonstrate compliance with the provisions of paragraph (g) of this section.

(4) The method of limiting organic HAP emissions to the level specified in §63.5120(a)(3) is the installation and operation of a PTE around each work station and associated curing oven in the coating line and the ventilation of all organic HAP emissions from each PTE to an oxidizer with an outlet organic HAP concentration of no greater than 20 ppmv on a dry basis. An enclosure that meets the requirements in §63.5160(e)(1) is considered a PTE. Initial compliance of the oxidizer with the outlet organic HAP concentration limit is demonstrated either through continuous emission monitoring according to paragraph (c)(4)(ii) of this section or through performance tests using the procedure in §63.5160(d). If this method is selected, you must meet the requirements of paragraph (c)(4)(i) of this section to demonstrate continuing achievement of 100 percent capture of organic HAP emissions and either paragraph (c)(4)(ii) or paragraph (c)(4)(iii) of this section, respectively, to demonstrate continuous compliance with the oxidizer outlet organic HAP concentration limit through continuous emission monitoring or continuous operating parameter monitoring:

(i) Whenever a work station is operated, continuously monitor the capture system operating parameter established in accordance with §63.5150(a)(4).

(ii) To demonstrate that the value of the exhaust gas organic HAP concentration at the outlet of the oxidizer is no greater than 20 ppmv, on a dry basis, install, calibrate, operate, and maintain CEMS according to the requirements of §63.5150(a)(2).

A. State and Federally Enforceable Section (continued)

(iii) To demonstrate continuous compliance with operating limits established in accordance with §63.5150(a)(3), whenever a work station is operated, continuously monitor the applicable oxidizer operating parameter.

(d) Capture and control to achieve the emission rate limit. If you use one or more capture systems and one or more control devices and limit the organic HAP emission rate to no more than 0.046 kg organic HAP emitted per liter of solids applied on a 12-month average as-applied basis, then you must follow one of the procedures in paragraphs (d)(1) through (3) of this section.

(1) If you use one or more solvent recovery devices, you must demonstrate compliance with the provisions in paragraph (e) of this section.

(2) If you use one or more oxidizers, you must demonstrate compliance with the provisions in paragraph (f) of this section.

(3) If you use both solvent recovery devices and oxidizers, or operate one or more never-controlled work stations or one or more intermittently controllable work stations, you must demonstrate compliance with the provisions in paragraph (g) of this section.

(e) Use of solvent recovery to demonstrate compliance. If you use one or more solvent recovery devices to control emissions from always-controlled work stations, you must show compliance by following the procedures in either paragraph (e)(1) or (2) of this section:

(1) Liquid-liquid material balance. Perform a liquid-liquid material balance for each month as specified in paragraphs (e)(1)(i) through (vi) of this section and use Equations 4 through 6 of this section to convert the data to units of this standard. All determinations of quantity of coating and composition of coating must be made at a time and location in the process after all ingredients (including any dilution solvent) have been added to the coating, or appropriate adjustments must be made to account for any ingredients added after the amount of coating has been determined.

(i) Measure the mass of each coating material applied on the work station or group of work stations controlled by one or more solvent recovery devices during the month.

(ii) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the organic HAP content of each coating material applied during the month following the procedure in §63.5160(b).

(iii) Determine the volatile matter content of each coating material applied during the month following the procedure in §63.5160(c).

(iv) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the solids content of each coating material applied during the month following the procedure in §63.5160(c).

(v) For each solvent recovery device used to comply with §63.5120(a), install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device must be initially certified by the manufacturer to be accurate to within ± 2.0 percent.

(vi) For each solvent recovery device used to comply with §63.5120(a), measure the amount of volatile matter recovered for the month.

(vii) Recovery efficiency, R_v . Calculate the volatile organic matter collection and recovery efficiency, R_v , using Equation 4 of section 63.5170.

A. State and Federally Enforceable Section (continued)

Where:

R_v = organic volatile matter collection and recovery efficiency, percent.

M_{kvr} = mass of volatile matter recovered in a month by solvent recovery device, k, kg.

M_i = mass of coating material, i, applied in a month, kg.

C_{vi} = volatile matter content of coating material, i, expressed as a weight fraction, kg/kg.

M_j = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material (excluding H₂O), j, applied in a month, kg.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

s = number of solvent recovery devices used to comply with the standard of §63.5120 of this subpart, in the facility.

(viii) Organic HAP emitted, H_e . Calculate the mass of organic HAP emitted during the month, H_e , using Equation 5 of section 63.5170.

Where:

H_e = total monthly organic HAP emitted, kg.

R_v = organic volatile matter collection and recovery efficiency, percent.

C_{hi} = organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg.

M_i = mass of coating material, i, applied in a month, kg.

C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

M_{ij} = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j, added to solids-containing coating material, i, in a month, kg.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(ix) Organic HAP emission rate based on solids applied for the 12-month compliance period, L_{annual} . Calculate the organic HAP emission rate based on solids applied for the 12-month compliance period, L_{annual} , using Equation 6 of section 63.5170(4) of this subpart.

A. State and Federally Enforceable Section (continued)

Where:

LANNUAL = mass organic HAP emitted per volume of solids applied for the 12-month compliance period, kg/liter.

He = total monthly organic HAP emitted, kg.

Csi = solids content of coating material, i, expressed as liter of solids/kg of material.

Mi = mass of coating material, i, applied in a month, kg.

y = identifier for months.

p = number of different coating materials applied in a month.

(x) Compare actual performance to performance required by compliance option. The affected source is in compliance with §63.5120(a) if it meets the requirement in either paragraph (e)(1)(x)(A) or (B) of this section:

(A) The average volatile organic matter collection and recovery efficiency, Rv, is 98 percent or greater each month of the 12-month compliance period; or

(B) The organic HAP emission rate based on solids applied for the 12-month compliance period, LANNUAL, is 0.046 kg organic HAP per liter solids applied or less.

(2) Continuous emission monitoring of control device performance. Use continuous emission monitors to demonstrate recovery efficiency, conduct an initial performance test of capture efficiency and volumetric flow rate, and continuously monitor a site specific operating parameter to ensure that capture efficiency and volumetric flow rate are maintained following the procedures in paragraphs (e)(2)(i) through (xi) of this section:

(i) Control device destruction or removal efficiency, DRE. For each control device used to comply with §63.5120(a), continuously monitor the gas stream entering and exiting the control device to determine the total volatile organic matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter and the volumetric flow rate in cubic meters per second, such that the total volatile organic matter mass flow rate in grams per second can be calculated using Equation 1 of §63.5160, and the percent destruction or removal efficiency, DRE, of the control device can be calculated for each month using Equation 2 of §63.5160.

(ii) Determine the percent capture efficiency, CE, for each work station in accordance with §63.5160(e).

(iii) Capture efficiency monitoring. Whenever a work station is operated, continuously monitor the operating parameter established in accordance with §63.5150(a)(4).

(iv) Control efficiency, R. Calculate the overall organic HAP control efficiency, R, achieved for each month using Equation 7 of section 63.5170.

A. State and Federally Enforceable Section (continued)

Where:

R=overall organic HAP control efficiency, percent.

DRE_k=organic volatile matter destruction or removal efficiency of control device, k, percent.

CEA=organic volatile matter capture efficiency of the capture system for work station, A, percent.

MA_i=mass of coating material, i, applied on work station, A, in a month, kg.

C_{vi}=volatile matter content of coating material, i, expressed as a weight fraction, kg/kg.

MA_j=mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material (including H₂O), j, applied on work station, A, in a month, kg.

M_i=mass of coating material, i, applied in a month, kg.

M_j=mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material (excluding H₂O), j, applied in a month, kg.

w=number of always-controlled work stations in the facility.

p=number of different coating materials applied in a month.

q=number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(v) If demonstrating compliance with the organic HAP emission rate based on solids applied, measure the mass of each coating material applied on each work station during the month.

(vi) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the organic HAP content of each coating material applied during the month in accordance with §63.5160(b).

(vii) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the solids content of each coating material applied during the month in accordance with §63.5160(c).

(viii) If demonstrating compliance with the organic HAP emission rate based on solids applied, calculate the organic HAP emitted during the month, H_e, for each month using Equation 8 section 63.5170:

A. State and Federally Enforceable Section (continued)

Where:

He=total monthly organic HAP emitted, kg.

DREk=organic volatile matter destruction or removal efficiency of control device, k, percent.

CEA=organic volatile matter capture efficiency of the capture system for work station, A, percent.

Chi=organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg.

MAi=mass of coating material, i, applied on work station, A, in a month, kg.

Chij=organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

MAij=mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j, added to solids-containing coating material, i, applied on work station, A, in a month, kg.

w=number of always-controlled work stations in the facility.

p=number of different coating materials applied in a month.

q=number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(ix) Organic HAP emission rate based on solids applied for the 12-month compliance period, LANNUAL. Calculate the organic HAP emission rate based on solids applied for the 12-month compliance period, LANNUAL, using Equation 6 of this section.

(x) Compare actual performance to performance required by compliance option. The affected source is in compliance with §63.5120(a) if each capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.5150 for each 3-hour period; and

(A) The overall organic HAP control efficiency, R, is 98 percent or greater for each; or

(B) The organic HAP emission rate based on solids applied for the 12-month compliance period, LANNUAL, is 0.046 kg organic HAP per liter solids applied or less.

(f) Use of oxidation to demonstrate compliance. If you use one or more oxidizers to control emissions from always controlled work stations, you must follow the procedures in either paragraph (f)(1) or (2) of this section:

(1) Continuous monitoring of capture system and control device operating parameters. Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in paragraphs (f)(1)(i) through (xi) of this section:

(i) For each oxidizer used to comply with §63.5120(a), determine the oxidizer destruction or removal efficiency, DRE, using the procedure in §63.5160(d).

(ii) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with §63.5150(a)(3).

(iii) Determine the capture system capture efficiency, CE, for each work station in accordance with §63.5160(e).

A. State and Federally Enforceable Section (continued)

- (iv) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with §63.5150(a)(4).
- (v) Calculate the overall organic HAP control efficiency, R , achieved using Equation 7 of this section.
- (vi) If demonstrating compliance with the organic HAP emission rate based on solids applied, measure the mass of each coating material applied on each work station during the month.
- (vii) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the organic HAP content of each coating material applied during the month following the procedure in §63.5160(b).
- (viii) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the solids content of each coating material applied during the month following the procedure in §63.5160(c).
- (ix) Calculate the organic HAP emitted during the month, H_e , for each month:
 - (A) For each work station and its associated oxidizer, use Equation 8 of this section.
 - (B) For periods when the oxidizer has not operated within its established operating limit, the control device efficiency is determined to be zero.
- (x) Organic HAP emission rate based on solids applied for the 12-month compliance period, L_{ANNUAL} . If demonstrating compliance with the organic HAP emission rate based on solids applied for the 12-month compliance period, calculate the organic HAP emission rate based on solids applied, L_{ANNUAL} , for the 12-month compliance period using Equation 6 of this section.
 - (A) The overall organic HAP control efficiency, R , is 98 percent or greater for each; or
 - (B) The organic HAP emission rate based on solids applied, L_{ANNUAL} , is 0.046 kg organic HAP per liter solids applied or less for the 12-month compliance period.
- (2) Continuous emission monitoring of control device performance. Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to ensure that capture efficiency is maintained. Compliance must be demonstrated in accordance with paragraph (e)(2) of this section.
- (g) Combination of capture and control. You must demonstrate compliance according to the procedures in paragraphs (g)(1) through (8) of this section if both solvent recovery and oxidizer control devices, one or more never controlled coil coating stations, or one or more intermittently controllable coil coating stations are operated; or more than one compliance procedure is used.
 - (1) Solvent recovery system using liquid/liquid material balance compliance demonstration. For each solvent recovery system used to control one or more work stations for which you choose to comply by means of a liquid-liquid material balance, you must determine the organic HAP emissions each month of the 12-month compliance period for those work stations controlled by that solvent recovery system according to either paragraph (g)(1)(i) or (ii) of this section:
 - (i) In accordance with paragraphs (e)(1)(i) through (iii) and (e)(1)(v) through (viii) of this section if the work stations controlled by that solvent recovery system are only always-controlled work stations; or
 - (ii) In accordance with paragraphs (e)(1)(ii) through (iii), (e)(1)(v) through (vi), and (h) of this section if the work stations controlled by that solvent recovery system include one or more never-controlled or intermittently-controllable work stations.

A. State and Federally Enforceable Section (continued)

(2) Solvent recovery system using performance test and continuous monitoring compliance demonstration. For each solvent recovery system used to control one or more coil coating stations for which you choose to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, each month of the 12-month compliance period you must meet the requirements of paragraphs (g)(2)(i) and (ii) of this section:

(i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in §63.5150(a)(4) to ensure that capture system efficiency is maintained; and

(ii) Determine the organic HAP emissions for those work stations served by each capture system delivering emissions to that solvent recovery system according to either paragraph (g)(2)(ii)(A) or (B) of this section:

(A) In accordance with paragraphs (e)(2)(i) through (iii) and (e)(2)(v) through (viii) of this section if the work stations served by that capture system are only always-controlled coil coating stations; or (B) In accordance with paragraphs (e)(2)(i) through (iii), (e)(2)(v) through (vii), and (h) of this section if the work stations served by that capture system include one or more never-controlled or intermittently-controllable work stations.

(5) Uncontrolled work stations. For uncontrolled work stations, each month of the 12-month compliance period you must determine the organic HAP applied on those work stations using Equation 9 of this section. The organic HAP emitted from an uncontrolled work station is equal to the organic HAP applied on that work station or

(B) In accordance with paragraphs (e)(2)(i) through (iii), (e)(2)(v) through (vii), and (h) of this section if the work stations served by that capture system include one or more never-controlled or intermittently-controllable work stations.

(5) Uncontrolled work stations. For uncontrolled work stations, each month of the 12-month compliance period you must determine the organic HAP applied on those work stations using Equation 9 of this section. The organic HAP emitted from an uncontrolled work station is equal to the organic HAP applied on that work station: Using equation 9 of 63.5170,

Where:

H_m =facility total monthly organic HAP applied on uncontrolled coil coating stations, kg.

Ch_i =organic HAP content of coating material, i , expressed as a weight-fraction, kg/kg.

MA_i =mass of coating material, i , applied on work station, A , in a month, kg.

Ch_{ij} =organic HAP content of solvent, j , added to coating material, i , expressed as a weight fraction, kg/kg.

MA_{ij} =mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , added to solids-containing coating material, i , applied on work station, A , in a month, kg.

x =number of uncontrolled work stations in the facility.

p =number of different coating materials applied in a month.

q =number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

A. State and Federally Enforceable Section (continued)

(6) If demonstrating compliance with the organic HAP emission rate based on solids applied, each month of the 12-month compliance period you must determine the solids content of each coating material applied during the month following the procedure in §63.5160(c).

(7) Organic HAP emitted. You must determine the organic HAP emissions for the affected source for each 12-month compliance period by summing all monthly organic HAP emissions calculated according to paragraphs (g)(1), (g)(2)(ii), (g)(3)(iii), (g)(4)(ii), and (g)(5) of this section.

(8) Compare actual performance to performance required by compliance option. The affected source is in compliance with §63.5120(a) for the 12-month compliance period if all operating parameters required to be monitored under paragraphs (g)(2) through (4) of this section were maintained at the values established in §63.5150; and it meets the requirement in either paragraph (g)(8)(i) or (ii) of this section.

(i) The total mass of organic HAP emitted by the affected source was not more than 0.046 kg HAP per liter of solids applied for the 12-month compliance period; or

(ii) The total mass of organic HAP emitted by the affected source was not more than 2 percent of the total mass of organic HAP applied by the affected source each month. You must determine the total mass of organic HAP applied by the affected source in each month of the 12-month compliance period using Equation 9 of this section.

(h) Organic HAP emissions from intermittently-controllable or never-controlled coil coating stations. If you have been expressly referenced to this paragraph by paragraphs (g)(1)(ii), (g)(2)(ii)(B), (g)(3)(iii)(B), or (g)(4)(ii)(B) of this section for calculation procedures to determine organic HAP emissions, you must for your intermittently-controllable or never-controlled work stations meet the requirements of paragraphs (h)(1) through (6) of this section:

(1) Determine the sum of the mass of all solids-containing coating materials which are applied on intermittently-controllable work stations in bypass mode, and the mass of all solids-containing coating materials which are applied on never-controlled coil coating stations during each month of the 12-month compliance period, MBi.

(2) Determine the sum of the mass of all solvents, thinners, reducers, diluents, and other nonsolids-containing coating materials which are applied on intermittently-controllable work stations in bypass mode, and the mass of all solvents, thinners, reducers, diluents and other nonsolids-containing coating materials which are applied on never-controlled work stations during each month of the 12-month compliance period, MBj.

(3) Determine the sum of the mass of all solids-containing coating materials which are applied on intermittently-controllable work stations in controlled mode, and the mass of all solids-containing coating materials which are applied on always-controlled work stations during each month of the 12-month compliance period, MCi.

(4) Determine the sum of the mass of all solvents, thinners, reducers, diluents, and other nonsolids-containing coating materials which are applied on intermittently-controllable work stations in controlled mode, and the mass of all solvents, thinners, reducers, diluents, and other nonsolids-containing coating materials which are applied on always-controlled work stations during each month of the 12-month compliance period, MCj.

A. State and Federally Enforceable Section (continued)

(5) Liquid-liquid material balance calculation of HAP emitted. For each work station or group of work stations for which you use the provisions of paragraph (g)(1)(ii) of this section, you must calculate the organic HAP emitted during the month using Equation 10 of 63.5170.

Where:

H_e = total monthly organic HAP emitted, kg.

M_{ci} = sum of the mass of solids-containing coating material, i , applied on intermittently-controllable work stations operating in controlled mode and the mass of solids-containing coating material, i , applied on always-controlled work stations, in a month, kg.

Ch_i = organic HAP content of coating material, i , expressed as a weight-fraction, kg/kg.

M_{cj} = sum of the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on intermittently-controllable work stations operating in controlled mode and the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on always-controlled work stations in a month, kg.

Ch_j = organic HAP content of solvent, j , expressed as a weight fraction, kg/kg.

M_{kvr} = mass of volatile matter recovered in a month by solvent recovery device, k , kg.

C_{vi} = volatile matter content of coating material, i , expressed as a weight fraction, kg/kg.

M_{Bi} = sum of the mass of solids-containing coating material, i , applied on intermittently-controllable work stations operating in bypass mode and the mass of solids-containing coating material, i , applied on never-controlled work stations, in a month, kg.

M_{Bj} = sum of the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on intermittently-controllable work stations operating in bypass mode and the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on never-controlled work stations, in a month, kg.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

s = number of solvent recovery devices used to comply with the standard of §63.5120 of this subpart, in the facility.

(6) Control efficiency calculation of HAP emitted. For each work station or group of work stations for which you use the provisions of paragraphs (g)(2)(ii)(B), (g)(3)(iii)(B), or (g)(4)(ii)(B) of this section, you must calculate the organic HAP emitted during the month, H_e , using Equation 11 of 63.5170.

Where:

H_e = total monthly organic HAP emitted, kg.

M_{ci} = sum of the mass of solids-containing coating material, i , applied on intermittently-controllable work stations operating in controlled mode and the mass of solids-containing coating material, i , applied on always-controlled work stations, in a month, kg.

Ch_i = organic HAP content of coating material, i , expressed as a weight-fraction, kg/kg.

A. State and Federally Enforceable Section (continued)

M_{cj} = sum of the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on intermittently-controllable work stations operating in controlled mode and the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on always-controlled work stations in a month, kg.

Ch_j = organic HAP content of solvent, j , expressed as a weight fraction, kg/kg.

DRE $_k$ = organic volatile matter destruction or removal efficiency of control device, k , percent.

CEA = organic volatile matter capture efficiency of the capture system for work station, A, percent.

M_{Bi} = sum of the mass of solids-containing coating material, i , applied on intermittently-controllable work stations operating in bypass mode and the mass of solids-containing coating material, i , applied on never-controlled work stations, in a month, kg.

M_{Bj} = sum of the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on intermittently-controllable work stations operating in bypass mode and the mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j , applied on never-controlled work stations, in a month, kg.

w_i = number of intermittently-controllable work stations in the facility.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

i) Capture and control system compliance demonstration procedures using a CPMS for a coil coating line. If you use an add-on control device, to demonstrate initial compliance for each capture system and each control device through performance tests and continuing compliance through continuous monitoring of capture system and control device operating parameters, you must meet the requirements in paragraphs (i)(1) through (3) of this section.

(1) Conduct an initial performance test to determine the control device destruction or removal efficiency, DRE, using the applicable test methods and procedures in §63.5160(d).

(2) Determine the emission capture efficiency, CE, in accordance with §63.5160(e).

(3) Whenever a coil coating line is operated, continuously monitor the operating parameters established according to §63.5150(a)(3) and (4) to ensure capture and control efficiency.

A. State and Federally Enforceable Section (continued)

- 13.** § 63.5180 What reports must I submit?
- (a) Submit the reports specified in paragraphs (b) through (i) of this section to the EPA Regional Office that serves the State or territory in which the affected source is located and to the delegated State agency:
- (b) You must submit an initial notification required in §63.9(b).
- (1) Submit an initial notification for an existing source no later than 2 years after June 10, 2002.
- (2) Submit an initial notification for a new or reconstructed source as required by §63.9(b).
- (3) For the purpose of this subpart, a title V permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
- (4) Submit a title V permit application used in lieu of the initial notification required under §63.9(b) by the same due dates as those specified in paragraphs (b)(1) and (2) of this section for the initial notifications.
- (c) You must submit a Notification of Performance Test as specified in §§63.7 and 63.9(e) if you are complying with the emission standard using a control device. This notification and the site-specific test plan required under §63.7(c)(2) must identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. You may consider the operating parameter identified in the site-specific test plan to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
- (d) You must submit a Notification of Compliance Status as specified in §63.9(h). You must submit the Notification of Compliance Status no later than 30 calendar days following the end of the initial 12-month compliance period described in §63.5130.
- (e) You must submit performance test reports as specified in §63.10(d)(2) if you are using a control device to comply with the emission standards and you have not obtained a waiver from the performance test requirement.
- (f) You must submit start-up, shutdown, and malfunction reports as specified in §63.10(d)(5) if you use a control device to comply with this subpart.
- (1) If your actions during a start-up, 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 start-up, shutdown, and malfunction plan specified in §63.6(e)(3), you must state such information in the report. The start-up, shutdown, or malfunction report will consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that will be submitted to the Administrator.
- (2) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (g) of this section.
- (g) You must submit semi-annual compliance reports containing the information specified in paragraphs (g)(1) and (2) of this section.
- (1) Compliance report dates.
- (i) The first semiannual reporting period begins 1 day after the end of the initial compliance period described in §63.5130(d) that applies to your affected source and ends 6 months later.

A. State and Federally Enforceable Section (continued)

- (ii) The first semiannual compliance report must cover the first semiannual reporting period and be postmarked or delivered no later than 30 days after the reporting period ends.
 - (iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
 - (iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
 - (v) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or part 71, and the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (g)(1)(i) through (iv) of this section.
- (2) The semi-annual compliance report must contain the following information:
- (i) Company name and address.
 - (ii) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
 - (iv) Identification of the compliance option or options specified in Table 1 to §63.5170 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning dates you used each option.
 - (v) A statement that there were no deviations from the standards during the reporting period, and that no CEMS were inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.
 - (h) You must submit, for each deviation occurring at an affected source where you are not using CEMS to comply with the standards in this subpart, the semi-annual compliance report containing the information in paragraphs (g)(2)(i) through (iv) of this section and the information in paragraphs (h)(1) through (3) of this section:
 - (1) The total operating time of each affected source during the reporting period.
 - (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken.
 - (3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable).
 - (i) You must submit, for each deviation occurring at an affected source where you are using CEMS to comply with the standards in this subpart, the semi-annual compliance report containing the information in paragraphs (g)(2)(i) through (iv) of this section, and the information in paragraphs (i)(1) through (12) of this section:
 - (1) The date and time that each malfunction started and stopped.
 - (2) The date and time that each CEMS was inoperative, except for zero (low-level) and high-level checks.

A. State and Federally Enforceable Section (continued)

- (3) The date and time that each CEMS was out-of-control, including the information in §63.8(c)(8).
- (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of start-up, shutdown, or malfunction or during another period.
- (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to start-up, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration of CEMS downtime during the reporting period, and the total duration of CEMS downtime as a percent of the total source operating time during that reporting period.
- (8) A breakdown of the total duration of CEMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.
- (9) A brief description of the metal coil coating line.
- (10) The monitoring equipment manufacturer(s) and model number(s).
- (11) The date of the latest CEMS certification or audit.
- (12) A description of any changes in CEMS, processes, or controls since the last reporting period.

[67 FR 39812, June 10, 2002, as amended at 68 FR 12592, Mar. 17, 2003]

A. State and Federally Enforceable Section (continued)

14. § 63.5190 What records must I maintain?

(a) You must maintain the records specified in paragraphs (a) and (b) of this section in accordance with §63.10(b)(1):

(1) Records of the coating lines on which you used each compliance option and the time periods (beginning and ending dates and times) you used each option.

(2) Records specified in §63.10(b)(2) of all measurements needed to demonstrate compliance with this subpart, including:

(i) Continuous emission monitor data in accordance with §63.5150(a)(2);

(ii) Control device and capture system operating parameter data in accordance with §63.5150(a)(1), (3), and (4);

(iii) Organic HAP content data for the purpose of demonstrating compliance in accordance with §63.5160(b);

(iv) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with §63.5160(c);

(v) Overall control efficiency determination or alternative outlet HAP concentration using capture efficiency tests and control device destruction or removal efficiency tests in accordance with §63.5160(d), (e), and (f); an

(vi) Material usage, HAP usage, volatile matter usage, and solids usage and compliance demonstrations using these data in accordance with §63.5170(a), (b), and (d);

(3) Records specified in §63.10(b)(3); and

(4) Additional records specified in §63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with §63.5150(a)(2).

(b) Maintain records of all liquid-liquid material balances that are performed in accordance with the requirements of §63.5170.

15. Delegation of Authority

§ 63.5200 What authorities may be delegated to the States?

(a) This subpart can be implemented and enforced by us, the EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and not transferred to the State, local, or tribal agency.

(c) Authority which will not be delegated to States, local, or tribal agencies:

(1) Approval of alternatives to the emission limitations in §63.5120;

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.5160;

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.5150; and

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §§63.5180 and 63.5190.

§§ 63.5201-63.5209 [Reserved]

A. State and Federally Enforceable Section (continued)

16. Table 1 to Subpart SSSS of Part 63—Operating Limits if Using Add-on Control Devices and Capture System

If you are required to comply with operating limits by 63.5121, you must comply with the applicable operating limits found in Table 1 in this section.

17. Subpart DDDDD -- National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

18. § 63.7480 What is the purpose of this subpart?

This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

19. § 63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, or existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory located at a major source as defined in §63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater located at a major source as defined in §63.7575.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after January 13, 2003, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

A. State and Federally Enforceable Section (continued)

- 20.** § 63.7491 Are any boilers or process heaters not subject to this subpart?
The types of boilers and process heaters listed in paragraphs (a) through (o) of this section are not subject to this subpart.
- (a) A municipal waste combustor covered by 40 CFR part 60, subpart AAAA, subpart BBBB, subpart Cb or subpart Eb.
 - (b) A hospital/medical/infectious waste incinerator covered by 40 CFR part 60, subpart Ce or subpart Ec.
 - (c) An electric utility steam generating unit that is a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity, and supplies more than one-third of its potential electric output capacity, and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.
 - (d) A boiler or process heater required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by 40 CFR part 63, subpart EEE (e.g., hazardous waste boilers).
 - (e) A commercial and industrial solid waste incineration unit covered by 40 CFR part 60, subpart CCCC or subpart DDDD.
 - (f) A recovery boiler or furnace covered by 40 CFR part 63, subpart MM.
 - (g) A boiler or process heater that is used specifically for research and development. This does not include units that only provide heat or steam to a process at a research and development facility.
 - (h) A hot water heater as defined in this subpart.
 - (i) A refining kettle covered by 40 CFR part 63, subpart X.
 - (j) An ethylene cracking furnace covered by 40 CFR part 63, subpart YY.
 - (k) Blast furnace stoves as described in the EPA document, entitled "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards," (EPA-453/R-01-005).
 - (l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63.
 - (m) Any boiler and process heater specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act (CAA).
 - (n) Temporary boilers as defined in this subpart.
 - (o) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

A. State and Federally Enforceable Section (continued)

- 21.** § 63.7495 When do I have to comply with this subpart?
(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than September 13, 2007.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing facility must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing facility must be in compliance with this subpart within 3 years after the facility becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.
- 22.** § 63.7499 What are the subcategories of boilers and process heaters?
The subcategories of boilers and process heaters are large solid fuel, limited use solid fuel, small solid fuel, large liquid fuel, limited use liquid fuel, small liquid fuel, large gaseous fuel, limited use gaseous fuel, and small gaseous fuel. Each subcategory is defined in §63.7575
- 23.** § 63.7500 What emission limits, work practice standards, and operating limits must I meet?
(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under §63.7507.

(2) You must meet each operating limit in Tables 2 through 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Tables 2 through 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under §63.8(f).

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

A. State and Federally Enforceable Section (continued)

- 24.** § 63.7505 What are my general requirements for complying with this subpart?
- (a) You must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.
 - (b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).
 - (c) You can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to §63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.
 - (d) If you demonstrate compliance with any applicable emission limit through performance testing, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).
 - (1) For each continuous monitoring system (CMS) required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your CMS.
 - (i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
 - (ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
 - (iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
 - (2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.
 - (i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);
 - (ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
 - (iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).
 - (3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
 - (4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
 - (e) If you have an applicable emission limit or work practice standard, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 20467, Apr. 20, 2006

A. State and Federally Enforceable Section (continued)

25. § 63.7506 Do any boilers or process heaters have limited requirements?

(a) New or reconstructed boilers and process heaters in the large liquid fuel subcategory or the limited use liquid fuel subcategory that burn only fossil fuels and other gases and do not burn any residual oil are subject to the emission limits and applicable work practice standards in Table 1 to this subpart. You are not required to conduct a performance test to demonstrate compliance with the emission limits. You are not required to set and maintain operating limits to demonstrate continuous compliance with the emission limits. However, you must meet the requirements in paragraphs (a)(1) and (2) of this section and meet the CO work practice standard in Table 1 to this subpart.

(1) To demonstrate initial compliance, you must include a signed statement in the Notification of Compliance Status report required in §63.7545(e) that indicates you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels.

(2) To demonstrate continuous compliance with the applicable emission limits, you must also keep records that demonstrate that you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. You must also include a signed statement in each semiannual compliance report required in §63.7550 that indicates you burned only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, during the reporting period.

(b) The affected boilers and process heaters listed in paragraphs (b)(1) through (3) of this section are subject to only the initial notification requirements in §63.9(b) (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart or any other requirements in subpart A of this part).

(1) Existing large and limited use gaseous fuel units.

(2) Existing large and limited use liquid fuel units.

(3) New or reconstructed small liquid fuel units that burn only gaseous fuels or distillate oil. New or reconstructed small liquid fuel boilers and process heaters that commence burning of any other type of liquid fuel must comply with all applicable requirements of this subpart and subpart A of this part upon startup of burning the other type of liquid fuel.

(c) The affected boilers and process heaters listed in paragraphs (c)(1) through (4) of this section are not subject to the initial notification requirements in §63.9(b) and are not subject to any requirements in this subpart or in subpart A of this part (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSM plans, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart, or any other requirements in subpart A of this part).

(1) Existing small solid fuel boilers and process heaters.

(2) Existing small liquid fuel boilers and process heaters.

(3) Existing small gaseous fuel boilers and process heaters.

(4) New or reconstructed small gaseous fuel units.

A. State and Federally Enforceable Section (continued)

- 26.** § 63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?
- (a) As an alternative to the requirement to demonstrate compliance with the HCl emission limit in table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in appendix A to this subpart.
- (b) As an alternative to the requirement to demonstrate compliance with the TSM emission limit in table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for the health-based alternative for manganese emissions under the procedures prescribed in appendix A to this subpart and comply with the TSM emission standards in table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions).

[70 FR 76933, Dec. 28, 2005]

27. Testing, Fuel Analyses, and Initial Compliance Requirements

§ 63.7510 What are my initial compliance requirements and by what date must I conduct them?

- (a) For affected sources that elect to demonstrate compliance with any of the emission limits of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to §63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, establishing operating limits according to §63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to §63.7525.
- (b) For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart.
- (c) For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 to this subpart. If your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, your initial compliance demonstration is conducting a performance evaluation of your continuous emission monitoring system for carbon monoxide according to §63.7525(a).
- (d) For existing affected sources, you must demonstrate initial compliance no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart.
- (e) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003 and November 12, 2004, you must demonstrate initial compliance with either the proposed emission limits and work practice standards or the promulgated emission limits and work practice standards no later than 180 days after November 12, 2004 or within 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).
- (f) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003, and November 12, 2004, and you chose to comply with the proposed emission limits and work practice standards when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limits and work practice standards within 3 years after November 12, 2004 or within 3 years after startup of the affected source, whichever is later.
- (g) If your new or reconstructed affected source commences construction or reconstruction after November 12, 2004, you must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

A. State and Federally Enforceable Section (continued)

- 28.** § 63.7515 When must I conduct subsequent performance tests or fuel analyses?
- (a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (d) of this section.
- (b) You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months after the previous performance test.
- (c) If your boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, you may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.
- (d) If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.
- (e) If you have an applicable work practice standard for carbon monoxide and your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, you must conduct annual performance tests for carbon monoxide according to §63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.
- (f) You must conduct a fuel analysis according to §63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540.
- (g) You must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to §63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in §63.7550.
- 29.** § 63.7520 What performance tests and procedures must I use?
- (a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in §63.7(c) if you elect to demonstrate compliance through performance testing.
- (b) You must conduct each performance test according to the requirements in Table 5 to this subpart.
- (c) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to §63.7506(a).
- (d) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and you must demonstrate initial compliance and establish your operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

A. State and Federally Enforceable Section (continued)

- (e) You may not conduct performance tests during periods of startup, shutdown, or malfunction.
- (f) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.
- (g) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A to part 60 of this chapter to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

30. § 63.7521 What fuel analyses and procedures must I use?

- (a) You must conduct fuel analyses according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable.
- (b) You must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.
 - (1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to demonstrate compliance.
 - (2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.
 - (i) The identification of all fuel types anticipated to be burned in each boiler or process heater.
 - (ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.
 - (iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.
 - (iv) For each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury.
 - (v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that will be used.

A. State and Federally Enforceable Section (continued)

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. Collect all the material (fines and coarse) in the full cross-section. Transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.

(2) If sampling from a fuel pile or truck, collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) Transfer all samples to a clean plastic bag for further processing.

(d) Prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) Thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) Break sample pieces larger than 3 inches into smaller sizes.

(3) Make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) Separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) Grind the sample in a mill.

(7) Use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart.

A. State and Federally Enforceable Section (continued)

- 31.** § 63.7522 Can I use emission averaging to comply with this subpart?
- (a) As an alternative to meeting the requirements of §63.7500, if you have more than one existing large solid fuel boiler located at your facility, you may demonstrate compliance by emission averaging according to the procedures in this section in a State that does not choose to exclude emission averaging.
- (b) For each existing large solid fuel boiler in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on November 12, 2004 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on November 12, 2004.
- (c) You may average particulate matter or TSM, HCl, and mercury emissions from existing large solid fuel boilers to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in paragraphs (d), (e), and (f) of this section.
- (d) The weighted average emissions from the existing large solid fuel boilers participating in the emissions averaging option must be in compliance with the limits in Table 1 to this subpart at all times following the compliance date specified in §63.7495.
- (e) You must demonstrate initial compliance according to paragraphs (e)(1) or (2) of this section.
- (1) You must use Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

Where:

AveWeighted = Average weighted emissions for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Hm = Maximum rated heat input capacity of boiler, i, in units of million Btu per hour.

n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use Equation 2 of this section as an alternative to using equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart

A. State and Federally Enforceable Section (continued)

Where:

AveWeighted = Average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Sm = Maximum steam generation by boiler, i, in units of pounds.

Cf = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(f) You must demonstrate continuous compliance on a 12-month rolling average basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) and (2). The first 12-month rolling-average period begins on the compliance date specified in §63.7495.

(1) For each calendar month, you must use Equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual heat capacity for each existing large solid fuel boiler participating in the emissions averaging option.

Where:

AveWeighted Emissions = 12-month rolling average weighted emission level for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate, calculated during the most recent compliance test, (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Hb = The average heat input for each calendar month of boiler, i, in units of million Btu.

n = Number of large solid fuel boilers participating in the emissions averaging option.

None

A. State and Federally Enforceable Section (continued)

Where:

AveWeighted Emissions = 12-month rolling average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate, calculated during the most recent compliance test (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Sa = Actual steam generation for each calendar month by boiler, i, in units of pounds.

Cf = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(g) You must develop and submit an implementation plan for emission averaging to the applicable regulatory authority for review and approval according to the following procedures and requirements in paragraphs (g)(1) through (4).

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing large solid fuel boilers in the averaging group, including for each either the applicable HAP emission level or the control technology installed on;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group of large solid fuel boilers;

(iii) The specific control technology or pollution prevention measure to be used for each emission source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(iv) The test plan for the measurement of particulate matter (or TSM), HCl, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable regulatory authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

A. State and Federally Enforceable Section (continued)

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating conditions.

(3) Upon receipt, the regulatory authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing large solid fuel boiler.

32. § 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495.

(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

A. State and Federally Enforceable Section (continued)

(b) If you have an applicable opacity operating limit, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (b)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and according to PS 1 of 40 CFR part 60, appendix B.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.

(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.

(c) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (c)(1) through (5) of this section by the compliance date specified in §63.7495.

A. State and Federally Enforceable Section (continued)

- (1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.
- (2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.
- (4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (c)(3) of this section.
- (5) Record the results of each inspection, calibration, and validation check.
- (d) If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (c) and (d)(1) through (4) of this section.
 - (1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.
 - (2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.
 - (3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
 - (4) Conduct a flow sensor calibration check at least semiannually.
- (e) If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (c) and (e)(1) through (6) of this section.
 - (1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.
 - (2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.
 - (3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.
 - (4) Check pressure tap pluggage daily.
 - (5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.
 - (6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.
- (f) If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (c) and (f)(1) through (3) of this section.
 - (1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.
 - (2) Ensure the sample is properly mixed and representative of the fluid to be measured.
 - (3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

A. State and Federally Enforceable Section (continued)

(g) If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.

(h) If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (c) and (h)(1) through (3) of this section.

(1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications

(i) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (i)(1) through (8) of this section.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

A. State and Federally Enforceable Section (continued)

- 33.** § 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?
- (a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to §63.7520, paragraph (c) of this section, and Tables 5 and 7 to this subpart OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to §63.7521, paragraph (d) of this section, and Tables 6 and 8 to this subpart.
- (b) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to §63.7506(a).
- (c) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Tables 2 through 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (c)(4) of this section, as applicable. You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (3) of this section, as applicable.
- (1) You must establish the maximum chlorine fuel input (C_{input}) during the initial performance testing according to the procedures in paragraphs (c)(1)(i) through (iii) of this section.
- (i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.
- (ii) During the performance testing for HCl, you must determine the fraction of the total heat input for each fuel type burned (Q_i) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (C_i).
- (iii) You must establish a maximum chlorine input level using Equation 5 of this section.

Where:

C_{input} = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

C_i = Arithmetic average concentration of chlorine in fuel type, i , analyzed according to §63.7521, in units of pounds per million Btu.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (Q_i) based on the fuel mixture that has the highest content of total selected metals, and the average TSM concentration of each fuel type burned (M_i).

(iii) You must establish a baseline TSM input level using Equation 6 of this section.

A. State and Federally Enforceable Section (continued)

Where:

TSM_{input} = Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.

M_i = Arithmetic average concentration of TSM in fuel type, i , analyzed according to §63.7521, in units of pounds per million Btu.

Q_i = Fraction of total heat input from based fuel type, i , based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(3) You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in paragraphs (c)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Q_i) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HG_i).

(iii) You must establish a maximum mercury input level using Equation 7 of this section.

Where:

$Mercury_{input}$ = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HG_i = Arithmetic average concentration of mercury in fuel type, i , analyzed according to §63.7521, in units of pounds per million Btu.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

A. State and Federally Enforceable Section (continued)

(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(d) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (d)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.

Where:

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.

C_{i90} = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

A. State and Federally Enforceable Section (continued)

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate that you calculate for your boiler or process heater using Equation 10 of this section must be less than the applicable emission limit for TSM.

Where:

TSM = TSM emission rate from the boiler or process heater in units of pounds per million Btu.

M_{i90} = 90th percentile confidence level concentration of TSM in fuel, i , in units of pounds per million Btu as calculated according to Equation 8 of this section.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest content of total selected metals. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(5) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must be less than the applicable emission limit for mercury.

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

HG_{i90} = 90th percentile confidence level concentration of mercury in fuel, i , in units of pounds per million Btu as calculated according to Equation 8 of this section.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(e) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

None

None

34. None

A. State and Federally Enforceable Section (continued)

§ 63.7535 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

35. § 63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.

(1) Following the date on which the initial performance test is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.

(2) You must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of TSM, HCl, and mercury, than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of TSM, chlorine, and mercury than the maximum values calculated during the last performance tests (if you demonstrate compliance through performance testing).

(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the HCl emission rate using Equation 9 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.

A. State and Federally Enforceable Section (continued)

- (ii) You must determine the new mixture of fuels that will have the highest content of chlorine.
- (iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 9 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.
- (4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel type or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 5 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 5 of §63.7530 are higher than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).
- (5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 10 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.
 - (i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).
 - (ii) You must determine the new mixture of fuels that will have the highest content of TSM.
 - (iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 10 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.
- (6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of §63.7530. If the results of recalculating the maximum total selected metals input using Equation 6 of §63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).
- (7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of §63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this section.
 - (i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).
 - (ii) You must determine the new mixture of fuels that will have the highest content of mercury.
 - (iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

A. State and Federally Enforceable Section (continued)

(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of §63.7530. If the results of recalculating the maximum total selected metals input using Equation 6 of §63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of §63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 7 of §63.7530. If the results of recalculating the maximum mercury input using Equation 7 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

A. State and Federally Enforceable Section (continued)

(10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to §63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.

(i) You must continuously monitor carbon monoxide according to §§63.7525(a) and 63.7535.

(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.

(iii) Keep records of carbon monoxide levels according to §63.7555(b).

(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) [Reserved]

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 20467, Apr. 20, 2006]

36. § 63.7541 How do I demonstrate continuous compliance under the emission averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (4) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing large solid fuel boilers participating in the emissions averaging option as determined in §63.7522(f) and (g);

(2) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit;

(3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and

(4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (4) of this section, except during periods of startup, shutdown, and malfunction, is a deviation.

A. State and Federally Enforceable Section (continued)

37. § 63.7545 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before November 12, 2004, you must submit an Initial Notification not later than 120 days after November 12, 2004. The Initial Notification must include the information required in paragraphs (b)(1) and (2) of this section, as applicable.

(1) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by §63.9(b)(2).

(2) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories (the limited use solid fuel subcategory, the limited use liquid fuel subcategory, or the limited use gaseous fuel subcategory), your Initial Notification must include the information required by §63.9(b)(2) and also a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.

(c) As specified in §63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530(a), you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (9), as applicable.

(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.

(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.

A. State and Federally Enforceable Section (continued)

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

38. § 63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in §63.7495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.7495.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

A. State and Federally Enforceable Section (continued)

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of §63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of §63.7530, the maximum TSM input operating limit using Equation 6 of §63.7530, or the maximum mercury input operating limit using Equation 7 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.

None

A. State and Federally Enforceable Section (continued)

(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c) (1) through (10) of this section and the information required in paragraphs (e) (1) through (12) of this section. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (i.e., what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

A. State and Federally Enforceable Section (continued)

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

A. State and Federally Enforceable Section (continued)

39. § 63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2) (vi) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

(d) For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (d)(1) through (5) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.

(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

A. State and Federally Enforceable Section (continued)

(4) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 6 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 10 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(e) If your boiler or process heater is subject to an emission limit or work practice standard in Table 1 to this subpart and has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, you must keep the records in paragraphs (e)(1) and (2) of this section.

(1) A copy of the federally enforceable permit that limits the annual capacity factor of the source to less than or equal to 10 percent.

(2) Fuel use records for the days the boiler or process heater was operating.

40. § 63.7560 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.

41. § 63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

A. State and Federally Enforceable Section (continued)

42. § 63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, the U.S. EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.7500(a) and (b) under §63.6(g).

(2) Approval of alternative opacity emission limits in §63.7500(a) under §63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major change to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major change to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.7575 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2 (the General Provisions), and in this section as follows:

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year, and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biomass fuel means unadulterated wood as defined in this subpart, wood residue, and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal litter; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total heat input (based on an annual average) from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition.

A. State and Federally Enforceable Section (continued)

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388–991. 1, “Standard Specification for Classification of Coals by Rank 1 ” (incorporated by reference, see §63.14(b)), coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures, for the purposes of this subpart. Coal derived gases are excluded from this definition.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

Construction/demolition material means waste building material that result from the construction or demolition operations on houses and commercial and industrial buildings.

Deviation. (1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless or whether or not such failure is permitted by this subpart.

(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396–02a, “Standard Specifications for Fuel Oils 1 ” (incorporated by reference, see §63.14(b)).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition.

Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

A. State and Federally Enforceable Section (continued)

Electrostatic precipitator means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Firetube boiler means a boiler in which hot gases of combustion pass through the tubes and water contacts the outside surfaces of the tubes.

Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, subbituminous coal, lignite, anthracite, biomass, construction/demolition material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 °F (99 °C).

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

Large liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent. Large gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Large solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

A. State and Federally Enforceable Section (continued)

Limited use gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any liquid or solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Limited use liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent. Limited use gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Limited use solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Minimum pressure drop means 90 percent of the lowest test-run average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means 90 percent of the lowest test-run average effluent pH measured at the outlet of the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber flow rate means 90 percent of the lowest test-run average flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent flow rate means 90 percent of the lowest test-run average sorbent (or activated carbon) flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

A. State and Federally Enforceable Section (continued)

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835–03a, "Standard Specification for Liquid Petroleum Gases" (incorporated by reference, see §63.14(b)).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396–02a, "Standard Specifications for Fuel Oils 1" (incorporated by reference, see §63.14(b)).

Responsible official means responsible official as defined in 40 CFR 70.2.

Small gaseous fuel subcategory includes any firetube boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and any boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Small liquid fuel subcategory includes any firetube boiler that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and any boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input. Small gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Small solid fuel subcategory includes any firetube boiler that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, and any other boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials

A. State and Federally Enforceable Section (continued)

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

Total selected metals means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Unadulterated wood means wood or wood products that have not been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote. Plywood, particle board, oriented strand board, and other types of wood products bound by glues and resins are included in this definition.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.

Watertube boiler means a boiler in which water passes through the tubes and hot gases of combustion pass over the outside surfaces of the tubes.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter and/or to absorb and neutralize acid gases, such as hydrogen chloride.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

- 43. Tables to Subpart DDDDD of Part 63
 - Table 1 to Subpart DDDDD of Part 63—Emission Limits and Work Practice Standards
- 44. Table 2 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Particulate Matter Emission Limits
- 45. Table 3 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Mercury Emission Limits and Boilers and Process Heaters That Choose To Comply With the Alternative Total Selected Metals Emission Limits
- 46. Table 4 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Hydrogen Chloride Emission Limits
- 47. Table 5 to Subpart DDDDD of Part 63—Performance Testing Requirements
- 48. Table 6 to Subpart DDDDD of Part 63—Fuel Analysis Requirements
- 49. Table 7 to Subpart DDDDD of Part 63—Establishing Operating Limits
- 50. Table 8 to Subpart DDDDD of Part 63—Demonstrating Continuous Compliance
- 51. Table 9 to Subpart DDDDD of Part 63—Reporting Requirements
- 52. Table 10 to Subpart DDDDD of Part 63—Applicability of General Provisions to Subpart DDDDD

A. State and Federally Enforceable Section (continued)

53. [69 FR 55253, Sept. 13, 2004, as amended at 71 FR 20468, Apr. 20, 2006]

Appendix A to Subpart DDDDD—Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives

1. Purpose/Introduction

This appendix provides the methodology and criteria for demonstrating that your affected source is eligible for the compliance alternative for the HCl emission limit and/or the total selected metals (TSM) emission limit. This appendix specifies emissions testing methods that you must use to determine HCl, chlorine, and manganese emissions from the affected units and what parts of the affected source facility must be included in the eligibility demonstration. You must demonstrate that your affected source is eligible for the health-based compliance alternatives using either a look-up table analysis (based on the look-up tables included in this appendix) or a site-specific compliance demonstration performed according to the criteria specified in this appendix. This appendix also specifies how and when you file any eligibility demonstrations for your affected source and how to show that your affected source remains eligible for the health-based compliance alternatives in the future.

2. Who Is Eligible To Demonstrate That They Qualify for the Health-Based Compliance Alternatives?

Each new, reconstructed, or existing affected source may demonstrate that they are eligible for the health-based compliance alternatives. Section 63.7490 of subpart DDDDD defines the affected source and explains which affected sources are new, existing, or reconstructed.

3. What Parts of My Facility Have To Be Included in the Health-Based Eligibility Demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD that emits either HCl or Cl₂ in the eligibility demonstration.

If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD that emits manganese in the eligibility demonstration.

4. How Do I Determine HAP Emissions From My Affected Source?

(a) You must conduct HAP emissions tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods specified in Table 1 of this appendix.

(1) If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl₂. When conducting fuel analysis, you must assume any chlorine detected will be emitted as Cl₂.

(2) If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

(b) Periods when emissions tests must be conducted. (1) You must not conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

A. State and Federally Enforceable Section (continued)

(2) You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.

(c) Number of test runs. You must conduct three separate test runs for each test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(d) Sampling locations. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(e) Collection of monitoring data for HAP control devices. During the emissions test, you must collect operating parameter monitoring system data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements in Tables 3 or 4, as appropriate, of subpart DDDDD using data from the monitoring system and the procedures specified in §63.7530 of subpart DDDDD.

(f) Nondetect data. You may treat emissions of an individual HAP as zero if all of the test runs result in a nondetect measurement and the condition in paragraph (f)(1) of this section is met for the manganese test method. Otherwise, nondetect data for individual HAP must be treated as one-half of the method detection limit.

(1) For manganese measured using Method 29 in appendix A to 40 CFR part 60, you analyze samples using atomic absorption spectroscopy (AAS).

(g) You must determine the maximum hourly emission rate for each appropriate emission point according to Equation 1 of this appendix. An appropriate emission point is any emission point emitting HCl, Cl₂, or Manganese from a subpart DDDDD emission unit.

Where:

$E_{i,s}$ = maximum hourly emission rate for HAP i at each emission point s associated with a subpart DDDDD emission unit j , lbs/hr

i = applicable HAP, where i = (HCl, Cl₂, or Manganese) s = individual emission point

j = each subpart DDDDD emission unit associated with an emission point, s

t = total number of subpart DDDDD emission units associated with an emission point s

$R_{i,j}$ = emission rate (the 3-run average as determined according to table 1 of this appendix or the pollutant concentration in the fuel samples analyzed according to §63.7521) for HAP i at subpart DDDDD emission unit j associated with emission point s , lb per million Btu.

I_j = Maximum rated heat input capacity of each subpart DDDDD unit j emitting HAP i associated with emission point s , million Btu per hour.

A. State and Federally Enforceable Section (continued)

5. What Are the Criteria for Determining If My Facility Is Eligible for the Health-Based Compliance Alternatives’

(a) Determine the HAP emissions from each appropriate emission point within the affected source facility using the procedures specified in section 4 of this appendix.

(b) Demonstrate that your facility is eligible for either of the health-based compliance alternatives using either the methods described in section 6 of this appendix (look-up table analysis) or section 7 of this appendix (site-specific compliance demonstration).

(c) Your facility is eligible for the health-based compliance alternative for HCl if one of the following two statements is true:

(1) The calculated HCl-equivalent emission rate is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that none of your HI values for HCl and Cl₂ are greater than 1.0 at locations where people live or congregate (e.g., schools, daycare centers, etc.);

(d) Your facility is eligible for the health-based compliance alternative for TSM if one of the following two statements is true:

(1) The manganese emission rate for all your subpart DDDDD sources is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that none of your HQ values for manganese are greater than 1.0 at locations where people live or congregate (e.g., schools, daycare centers, etc.).

6. How Do I Conduct a Look-Up Table Analysis?

You may use look-up tables to demonstrate that your facility is eligible for either the compliance alternative for HCl emissions limit or the compliance alternative for the TSM emissions limit, unless your permitting authority determines that the look-up table analysis in this section is not applicable to your facility on technical grounds due to site-specific variations that are not accounted for in the look-up table analysis (e.g. presence of complex terrain, rain caps, or building downwash effects).

(a) HCl compliance alternative. (1) Using the emission rates for HCl and Cl₂ determined according to section 4 of this appendix, calculate, using equation 2 of this appendix, the toxicity-weighted emission rate (expressed in HCl-equivalents) for each emission point that emits HCl or Cl₂ from any subpart DDDDD sources. Then, calculate the weighted average stack height using equation 3 of this appendix.

Where:

TWs = the toxicity-weighted emission rate (in HCl-equivalent) for each emission point s, lb/hr.

s = individual emission points

EHCl,s = the maximum hourly emission rate for HCl at emission point s, lb/hr

ECI₂,s = the maximum hourly emission rate for Cl₂ at emission point s, lb/hr

A. State and Federally Enforceable Section (continued)

RVC12 = the reference value for Cl2

RVHCl = the reference value for HCl

(reference values for HCl and Cl2 can be found at <http://www.epa.gov/ttn/atw/toxsource/summary.html>).

Where:

HHCl = weighted average stack height for determining the maximum allowable HCl-equivalent emission rate (in Table 2 to this appendix), m.

s = individual emission points

n = total number of emission points

TWs = toxicity-weighted HCl-equivalent emission rate from each emission point (from equation 2), lb/hr.

Hs = height of each individual stack, m

TWT = total toxicity-weighted HCl-equivalent emission rate from the source (summed for all emission points), lb/hr.

(2) Calculate the total toxicity-weighted emission rate for your affected source by summing the toxicity-weighted emission rate for each appropriate subpart DDDDD emission point.

(3) Using the weighted average stack height and the minimum distance between any appropriate subpart DDDDD emission point at the source and the property boundary, identify the appropriate maximum allowable toxicity weighted emission rate for your affected source, expressed in HCl-equivalents, from table 2 of this appendix. Appropriate emission points are those that emit HCl or Cl2, or both, from subpart DDDDD units. If one or both of these values does not match the exact values in the look-up tables, then use the next lowest table value. (Note: If your weighted average stack height is less than 5 meters (m), you must use the 5 meter row.) Your affected source is eligible to comply with the health-based alternative for HCl emissions if the value calculated in paragraph (a)(2) of this section, determined using the methods specified in this appendix, does not exceed the appropriate value in table 2 of this appendix.

(b) TSM Compliance Alternative. Using the emission rates for manganese determined according to section 4 of this appendix, calculate the total manganese emission rate for your affected source by summing the maximum hourly manganese emission rates for all your subpart DDDDD units. Identify the appropriate allowable emission rate in table 3 of this appendix for your affected source using the weighted average stack height value and the minimum distance between any appropriate subpart DDDDD emission point at the facility and the property boundary. Appropriate emission points are those that emit manganese from subpart DDDDD units. If one or both of these values does not match the exact values in the look-up tables, then use the next lowest table value. (Note: If your weighted average stack height is less than 5 meters, you must use the 5 meter row.) Your affected source is eligible to comply with the health-based alternative for manganese emissions and may exclude manganese when demonstrating compliance with the TSM emission limit if the total manganese emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value specified in table 3 of this appendix.

A. State and Federally Enforceable Section (continued)

Where:

HMn = weighted average stack height for determining the maximum allowable emission rate for manganese (in table 3 to this appendix), m.

s = individual emission points

n = total number of emission points

EMn,s= maximum hourly manganese emissions from emission point s, lbs/hr.

Hs = height of each individual stack s

EMn,T = total maximum hourly manganese emissions from affected source (sum emission rates from all emission points), lb/hr

None

How Do I Conduct a Site-Specific Compliance Demonstration?

If you fail to demonstrate that your facility is able to comply with one or both of the alternative health-based emission standards using the look-up table approach, you may choose to perform a site-specific compliance demonstration for your facility. You may use any scientifically-accepted peer-reviewed risk assessment methodology for your site-specific compliance demonstration. An example of one approach for performing a site-specific compliance demonstration for air toxics can be found in the EPA's "Air Toxics Risk Assessment Reference Library, Volume 2, Site-Specific Risk Assessment Technical Resource Document", which may be obtained through the EPA's Air Toxics Web site at http://www.epa.gov/ttn/fera/risk_atoxic.html.

(a) Your facility is eligible for the HCl alternative compliance option if your site-specific compliance demonstration shows that the maximum HI for HCl and Cl₂ from your subpart DDDDD sources is less than or equal to 1.0.

(b) Your facility is eligible for the TSM alternative compliance option if your site-specific compliance demonstration shows that the maximum HQ for manganese from your subpart DDDDD sources is less than or equal to 1.0.

(c) At a minimum, your site-specific compliance demonstration must:

(1) Estimate long-term inhalation exposures through the estimation of annual or multi-year average ambient concentrations;

(2) Estimate the inhalation exposure for the individual most exposed to the facility's emissions;

(3) Use site-specific, quality-assured data wherever possible;

(4) Use health-protective default assumptions wherever site-specific data are not available, and;

(5) Contain adequate documentation of the data and methods used for the assessment so that it is transparent and can be reproduced by an experienced risk assessor and emissions measurement expert.

A. State and Federally Enforceable Section (continued)

(d) Your site-specific compliance demonstration need not:

(1) Assume any attenuation of exposure concentrations due to the penetration of outdoor pollutants into indoor exposure areas;

(2) Assume any reaction or deposition of the emitted pollutants during transport from the emission point to the point of exposure.

8. What Must My Health-Based Eligibility Demonstration Contain?

(a) Your health-based eligibility demonstration must contain, at a minimum, the information specified in paragraphs (a)(1) through (6) of this section.

(1) Identification of each appropriate emission point at the affected source facility, including the maximum rated capacity of each appropriate emission point.

(2) Stack parameters for each appropriate emission point including, but not limited to, the parameters listed in paragraphs (a)(2)(i) through (iv) below:

(i) Emission release type.

(ii) Stack height, stack area, stack gas temperature, and stack gas exit velocity.

(iii) Plot plan showing all emission points, nearby residences, and fenceline.

(iv) Identification of any control devices used to reduce emissions from each appropriate emission point.

(3) Emission test reports for each pollutant and appropriate emission point which has been tested using the test methods specified in Table 1 of this appendix, including a description of the process parameters identified as being worst case. Fuel analyses for each fuel and emission point which has been conducted including collection and analytical methods used.

(4) Identification of the RfC values used in your look-up table analysis or site-specific compliance demonstration.

(5) Calculations used to determine the HCl-equivalent or manganese emission rates according to sections 6(a) or (b) of this appendix.

(6) Identification of the controlling process factors (including, but not limited to, fuel type, heat input rate, type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) that will become Federally enforceable permit conditions used to show that your facility remains eligible for the health-based compliance alternatives.

(b) If you use the look-up table analysis in section 6 of this appendix to demonstrate that your facility is eligible for either health-based compliance alternative, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (b)(1) through (3) of this section.

(1) Calculations used to determine the weighted average stack height of the subpart DDDDD emission points that emit manganese, HCl, or Cl₂.

(2) Identification of the subpart DDDDD emission point, that emits either manganese or HCl and Cl₂, with the minimum distance to the property boundary of the facility.

A. State and Federally Enforceable Section (continued)

(3) Comparison of the values in the look-up tables (Tables 2 and 3 of this appendix) to your maximum HCl-equivalent or manganese emission rates.

(c) If you use a site-specific compliance demonstration as described in section 7 of this appendix to demonstrate that your facility is eligible, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (c)(1) through (7) of this section:

(1) Identification of the risk assessment methodology used.

(2) Documentation of the fate and transport model used.

(3) Documentation of the fate and transport model inputs, including the information described in paragraphs (a)(1) through (5) of this section converted to the dimensions required for the model and all of the following that apply: meteorological data; building, land use, and terrain data; receptor locations and population data; and other facility-specific parameters input into the model.

(4) Documentation of the fate and transport model outputs.

(5) Documentation of any exposure assessment and risk characterization calculations.

(6) Comparison of the HQ HI to the limit of 1.0.

(d) To be eligible for either health-based compliance alternative, the parameters that defined your affected source as eligible for the health-based compliance alternatives must be submitted to your permitting authority for incorporation into your title V permit, as federally enforceable limits, at the same time you submit your health-based eligibility demonstration. These parameters include, but are not limited to, fuel type, fuel mix (annual average), emission rate, type of control devices, process parameters (e.g., maximum heat input), and non-process parameters (e.g., stack height).

54. When Do I Have To Complete and Submit My Health-Based Eligibility Demonstration?

(a) If you have an existing affected source, you must complete and submit your eligibility demonstration to your permitting authority, along with a signed certification that the demonstration is an accurate depiction of your facility, no later than the date one year prior to the compliance date of subpart DDDDD. A separate copy of the eligibility demonstration must be submitted to: U.S. EPA, Risk and Exposure Assessment Group, Emission Standards Division (C404-01), Attn: Group Leader, Research Triangle Park, North Carolina 27711, electronic mail address REAG@epa.gov.

(b) If you have a new or reconstructed affected source that starts up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, then you may submit an eligibility demonstration at any time after September 13, 2004 but you must comply with the emissions limits in table 1 to this subpart and all other requirements of subpart DDDDD until your eligibility demonstration is submitted to your permitting authority in accordance with the requirements of section 10 of this appendix.

A. State and Federally Enforceable Section (continued)

(c) If you have a new or reconstructed affected source that starts up after the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after the effective date for subpart DDDDD, then you must follow the schedule in paragraphs (c)(1) and (2) of this section.

(1) You must complete and submit a preliminary eligibility demonstration based on the information (e.g., equipment types, estimated emission rates, process and non-process parameters, reference values, etc.) that will be used to apply for your title V permit. This preliminary eligibility demonstration must be submitted with your application for approval of construction or reconstruction. You must base your preliminary eligibility demonstration on the maximum emissions allowed under your title V permit. If the preliminary eligibility demonstration indicates that your affected source facility is eligible for either compliance alternative, then you may start up your new affected source and your new affected source will be considered in compliance with the alternative standard and subject to the compliance requirements in this appendix.

(2) You must conduct the emission tests or analyses specified in section 4 of this appendix upon initial startup and use the results of these emissions tests to complete and submit your eligibility demonstration within 180 days following your initial startup date.

10. When Do I Become Eligible for the Health-Based Compliance Alternatives?

(a) For existing sources, new sources, or reconstructed sources that start up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, you are eligible to comply with a health-based compliance alternative upon submission of a complete demonstration meeting all the requirements of paragraph 8 for the applicable alternative. However, your eligibility demonstration may be reviewed by the permitting authority or by EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified by the permitting authority or by EPA of any deficiencies in your submission, then you are not eligible for the health-based compliance alternative until the permitting authority or EPA verifies that the deficiencies are corrected.

(b) For new or reconstructed sources that start up after the effective date of subpart DDDDD, you are eligible to comply with a the health-based compliance alternatives upon submission of a complete preliminary eligibility determination in accordance with paragraph (c)(1) of section 9 that demonstrates your affected source is eligible for the applicable alternative. You may then start up your source and conduct the necessary testing in accordance with paragraph (c)(2) of section 9. The eligibility demonstration submitted in accordance with paragraph (c)(2) of section 9 may be reviewed by the permitting authority or by EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified in writing by the permitting authority of any deficiencies in your submission, then you have 30 days to correct the deficiencies unless the permitting authority agrees to extend this time to a period not to exceed 90 days. If the deficiencies are not corrected within the applicable time period, you will not be eligible for the health-based compliance alternative until the permitting authority verifies that the deficiencies are corrected.

(c) If the title V permit conditions requested in accordance with paragraph (d) of section 8 are disapproved by the permitting authority, then your affected source must comply with the applicable emission limits, operating limits, and work practice standards in subpart DDDDD by the compliance dates specified in §63.7495. Until the requested conditions (or alternative conditions meeting the requirements of paragraph (d) of section 8) are incorporated into the permit, compliance with the proposed conditions shall be considered compliance with the health-based alternative.

A. State and Federally Enforceable Section (continued)

How Do I Ensure That My Facility Remains Eligible for the Health-Based Compliance Alternatives?

(a) You must update your eligibility demonstration and resubmit it each time that any of the parameters that defined your affected source as eligible for the health-based compliance alternatives changes in a way that could result in increased HAP emissions or increased risk from exposure to emissions. These parameters include, but are not limited to, fuel type, fuel mix (annual average), type of control devices, HAP emission rate, stack height, process parameters (e.g., heat input capacity), relevant reference values, and locations where people live).

(b) If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section that is under your control (e.g. change in heat input capacity of your boiler), you must submit your revised eligibility demonstration to the permitting authority prior to making the change and revise your permit to incorporate the change. If your affected source is no longer eligible for the health-based compliance alternatives, then you must comply with the applicable emission limits, operating limits, and compliance requirements in subpart DDDDD prior to making the process change and revising your permit. If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section that is outside of your control (e.g. change in a reference value), and that change causes your source to no longer be able to meet the criteria for the health-based compliance alternatives, your source must comply with the applicable emission limits, operating limits, and compliance requirements in subpart DDDDD within 3 years.

(c) Your revised eligibility demonstration may be reviewed by the permitting authority or EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified by the permitting authority or EPA of any deficiencies in your submission, you will not remain eligible for the health-based compliance alternatives until the permitting authority or EPA verifies that the deficiencies are corrected.

12. What Records Must I Keep?

You must keep records of the information used in developing the eligibility demonstration for your affected source, including all of the information specified in section 8 of this appendix.

Definitions

The definitions in §63.7575 of subpart DDDDD apply to this appendix. Additional definitions applicable for this appendix are as follows:

Hazard Index (HI) means the sum of more than one hazard quotient for multiple substances and/or multiple exposure pathways.

Hazard Quotient (HQ) means the ratio of the predicted media concentration of a pollutant to the media concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the RfC.

Look-up table analysis means a risk screening analysis based on comparing the HAP or HAP-equivalent emission rate from the affected source to the appropriate maximum allowable HAP or HAP-equivalent emission rates specified in Tables 2 and 3 of this appendix.

Reference Concentration (RfC) means an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. It can be derived from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.

A. State and Federally Enforceable Section (continued)

Worst-case operating conditions means operation of an affected unit during emissions testing under the conditions that result in the highest HAP emissions or that result in the emissions stream composition (including HAP and non-HAP) that is most challenging for the control device if a control device is used. For example, worst-case conditions could include operation of an affected unit firing solid fuel likely to produce the most HAP.

- 55. Table 1 to Appendix B of Subpart DDDDD_Emission Test Methods
- 56. Table 2 to Appendix A of Subpart DDDDD_Allowable Toxicity-Weighted Emission Rate Expressed in HCl Equivalents (lbs/hr)
- 57. Table 3 to Appendix A of Subpart DDDDD_Allowable Manganese Emission Rate (lbs/hr)

B. State Only Enforceable Section

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

B001 - office boiler;
B002 - make-up air heaters;
B003 - unit heaters;
T002 - storage tank 1;
T003 - storage tank 2;
T004 - storage tank 3; and
Z005 - five parts washers.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Paint line Steam Boiler (B004)

Activity Description: Provides hot water for wet section of 66 in coating line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
16.8 mmBtu/hr Eclipse Lookout natural gas-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 04-348 as 9/24/86)	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-17-10(B)(1), 3745-21-07(B) and 3745-21-08(B)</p> <p>1.5 tpy of particulate emissions (PE)</p> <p>0.1 pound of nitrogen oxides (NOx) per mmBtu of actual heat input</p> <p>10.3 tpy of NOx</p> <p>0.08 pound of carbon monoxide (CO) per mmBtu of actual heat input</p> <p>6.1 tpy of CO</p> <p>0.30 grain of sulfur per 100 cubic feet of natural gas</p> <p>0.00083 pound of sulfur dioxide (SO₂) per mmBtu of actual heat input</p> <p>0.1 tpy of SO₂</p> <p>0.005 pound of volatile organic compounds (VOC) per mmBtu of actual heat input</p> <p>0.2 tpy of VOC</p> <p>OAC rule 3745-17-07(A)(1) See A.I.2.a below.</p> <p>OAC rule 3745-17-10(B)(1) 0.020 pound of PE per mmBtu of actual heat input</p> <p>OAC rule 3745-18-06(A) See A.I.2.b below.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(B)	See A.1.2.c below.
	OAC rule 3745-21-08(B)	See A.1.2.c below.
	40 CFR PArt 63, Subpart DDDDD	See A.2.d. below

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-21-07 by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 04-348.

On November 5,2002, OAC rule 3745-21-08 was revised to delete Paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SOP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.d The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD (See Part II sections B.1 through B.16).

II. Operational Restrictions

- 1. The permittee shall burn only natural gas as fuel in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1)]

III. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 2. The permittee shall maintain annual records of the total quantity of natural gas burned in this emissions unit and the total hours of operation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.b Emission Limitation:

0.020 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated based upon a particulate emission factor of 1.9 pounds of particulates per million standard cubic feet, a heating value of 1020 Btu per standard cubic foot, and the monitoring and record keeping requirements specified in section A.III. This particulate emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and OAC rule 3745-17-03(B)(9).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.c Emission Limitation:

1.5 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the particulate emission limitation, in lb/mmBtu, by the maximum heat input capacity of 16.8 mmBtu/hr, and by the annual hours of operation for the emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.d Emission Limitation:

0.08 pound of CO per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated based upon the monitoring and record keeping requirements specified in section A.III., an emission factor of 84 pounds of CO per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This CO emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.e Emission Limitation:

6.1 tpy of CO

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the CO emission limitation, in lb/mmBtu, by the maximum heat input capacity of 16.8 mmBtu/hr, and by the annual hours of operation for the emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.f Emission Limitation:

0.1 pound of NO_x per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated based upon the monitoring and record keeping requirements specified in section A.III, an emission factor of 100 pounds of NO_x per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This NO_x emission factor is specified in Table 1.4-1 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall demonstrate compliance with this NO_x emission limitation in accordance with the methods and procedures specified in Method 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.g Emission Limitation:

10.3 tpy of NO_x

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the NO_x emission limitation, in lb/mmBtu, by the maximum heat input capacity of 16.8 mmBtu/hr, and by the annual hours of operation for the emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.h Emission Limitation:

0.30 grain of sulfur per 100 cubic feet of natural gas

Applicable Compliance Method:

The exclusive use of natural gas as fuel will be considered an adequate demonstration of compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.i Emission Limitation:

0.00083 pound of SO₂ per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated based upon an emission factor of 0.6 pound of SO₂ per million standard cubic feet, a heating value of 1020 Btu per standard cubic foot, and the monitoring and record keeping requirements specified in section A.III. This SO₂ emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-18-04(E).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.j Emission Limitation:

0.1 tpy of SO₂

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the SO₂ emission limitation, in lb/mmBtu, by the maximum heat input capacity of 16.8 mmBtu/hr, and by the annual hours of operation for the emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.k Emission Limitation:

0.005 pound of VOC per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated based upon the monitoring and record keeping requirements specified in section A.III, an emission factor of 5.5 pounds of VOC per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This VOC emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.l Emission Limitation:

0.2 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the VOC emission limitation, in lb/mmBtu, by the maximum heat input capacity of 16.8 mmBtu/hr, and by the annual hours of operation for the emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

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: 66 inch coil coating line (K001)
Activity Description: Aluminum coil coating line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
36-inch coil coating line second coater with a 16 mmBtu/hr direct-fired natural gas drying oven controlled by a permanent total enclosure and a catalytic incinerator	OAC rule 3745-31-05(A)(3) (PTI 04-1352 issued 01/27/05)	70.0 pounds per hour of volatile organic compounds (VOC), including emissions from cleanup materials 1.9 pounds per hour of carbon monoxide (CO) 8.3 tons per year of CO 2.3 pounds per hour of nitrogen oxides (NOx) 10.07 tons per year of NOx 0.04 pound per hour of particulate emissions (PE) 0.18 ton per year of PE 0.01 pound per hour of sulfur dioxide (SO2) 0.04 ton per year of SO2 See A.I.2.a through A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and 40 CFR Part 60, Subpart TT.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(C)	182.1 tons/yr of VOC as a rolling 12-month, based on a 365-day summation of the daily emissions from emissions from coating and cleanup materials
	OAC rule 3745-17-07(A)(1)	See A.I.2.d below
	OAC rule 3745-17-11(A)(2)	See A.I.2.e below
	OAC rule 3745-18-06(11)	See A.I.2.e below
	OAC rule 3745-21-08(B)	See A.I.2.f below
	OAC rule 3745-21-09(B)(6)	See A.I.2.e below
	OAC rule 3745-21-09(E)	See A.I.2.e below
	40 CFR Part 63, Subpart SSSS	See A.I.2.g below

2. Additional Terms and Conditions

- 2.a** The permittee shall operate and maintain a permanent total enclosure and a catalytic incinerator to capture and control the VOC emissions.
- 2.b** The permittee shall maintain a minimum 90% overall control efficiency for the VOC emissions from this emissions unit.
- 2.c** The permittee shall maintain a permanent total enclosure that shall capture 100% of the VOC emitted by the coating applicator.
- 2.d** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.f** The permittee has satisfied the "best available control techniques and operating practices" required to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5,2002, OAC rule 3745-21-08 was revised to delete Paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SOP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.g** The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart SSSS.[See Part II sections A.1 through A.16.]

II. Operational Restrictions

1. This emissions unit shall be totally enclosed such that all the VOC emissions are captured for venting to the catalytic incinerator. Compliance with the following criteria, as specified by USEPA Method 204, shall be met by the permittee:
 - a. any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator;
 - b. the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all the NDO's shall be at least 3,600 m/hr (200 fpm);
 - d. the differential pressure between the inside and outside of the enclosure shall not be less than 0.007 inch of water as a 3-hour average;
 - e. the direction of air flow through all NDO's shall be into the enclosure;
 - f. all access doors and windows whose areas are not included in section (b) and are not included in the calculations in section (c) shall be closed during routine operation of the process; and
 - g. all VOC emissions from the coating line must be captured and contained for discharge to the catalytic incinerator.

[Authority for term: OAC rule 3745-77-07(A)(1)]

2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(A)(1)]

3. The permittee shall burn only natural gas in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1)]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record each day, all 3-hour blocks of time during which the permanent total enclosure was not maintained at an average differential pressure of at least 0.007 inch of water column whenever the emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. These devices shall have an accuracy of plus or minus 2.5 degrees Celsius or plus or minus 0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater, pursuant to the requirements specified in 40 CFR 60.464(c). The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be 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 each day:

- a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
- b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance; and
- c. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

3. The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating, as applied;
 - b. the pounds of VOC per gallon of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating;
 - c. the total uncontrolled VOC emissions from all coatings, in pounds per day;
 - d. the uncontrolled, daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings;
 - e. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the controlled VOC emission rate shall be calculated using (i) the daily volume-weighted VOC content recorded in accordance with paragraph (d) above and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);

[Authority for term: OAC rule 3745-77-07(C)(1)]

III. Monitoring and/or Record Keeping Requirements (continued)

- f. the name and identification of each cleanup material employed;
- g. the number of gallons of each cleanup material employed;
- h. the uncontrolled VOC content of each cleanup material, in pounds per gallon;
- i. the total uncontrolled VOC emissions from all cleanup materials, in pounds per day;
- j. the total number of hours the emissions unit was in operation;
- k. the average hourly uncontrolled VOC emissions from all coatings and cleanup materials, i.e., ((c)+(i))/(j), in pounds per hour (average);
- l. the average hourly controlled VOC emissions from all coatings and cleanup materials, in pounds per hour, calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance; and
- m. the daily average coating usage, in gallons per hour.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 4. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the calculated, controlled VOC emissions from all coatings and cleanup materials, in tons per month;
 - b. the rolling, 12-month summation of VOC emissions from all coatings and cleanup materials, in tons;
 - c. the total volume, in gallons, as applied, of all coatings employed;
 - d. the total volume, in gallons, of all cleanup materials employed;
 - e. the uncontrolled, monthly volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings; and
 - f. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the controlled VOC emission rate shall be calculated using (i) the monthly volume-weighted VOC content recorded in accordance with paragraph (e) above and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 5. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

IV. Reporting Requirements

- 1. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure, when the emissions unit was in operation, was not maintained at an average differential pressure of at least 0.007 inch of water column.

[Authority for term: OAC rule 3745-77-07(C)(1)]

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

3. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

4. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the calculated, controlled VOC emission rate exceeded 70 lbs/hr, and the actual calculated, controlled VOC emission rate for each such day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

5. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitation for VOC.

[Authority for term: OAC rule 3745-77-07(C)(1)]

6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the hourly coating and/or monthly cleanup material limitation(s).

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

8. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements

1.a Compliance with the emission limitations in section A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

70 lbs/hr of VOC, including emissions from cleanup materials

Applicable Compliance Method:

VOC from the coatings:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.3 and the overall control efficiency determined during the most recent stack test which demonstrated compliance (99.6% based on June 5,2005 stack test). If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, and methods and procedures of OAC rule 3745-21-10(C).

VOC from the combustion sources (oven and incinerator):

Compliance shall be demonstrated based upon the maximum total burner capacity of 23.5 mmBtu/hr, an emission factor of 5.5 pounds of VOC per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This VOC emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98.

If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.b Emission Limitation:

100% capture efficiency for the VOC emissions

Applicable Compliance Method:

If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 204 of 40 CFR Part 60, Appendix A and the methods and procedures of OAC rule 3745-21-10(C).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.c Emission Limitation:

90% overall control efficiency for the VOC emissions

Applicable Compliance Method:

If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, USEPA Methods 204 through 204F of 40 CFR Part 51, Appendix M, and methods and procedures of OAC rule 3745-21-10(C).

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.d Emission Limitation:

182.1 tons of VOC per rolling, 12-month period

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.3 and A.III.4.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.e Emission Limitation:

1.9 lb/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner capacity of 23.5 mmBtu/hr, an emission factor of 84 pounds of CO per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This CO emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.f Emission Limitation:

8.3 tpy of CO

Applicable Compliance Method:

The annual emission limitation is based on the hourly CO emission rate for 8760 hrs/yr. Therefore, compliance with the hourly emission limitation constitutes compliance with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.g Emission Limitation:

2.3 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner capacity of 23.5 mmBtu, an emission factor of 100 pounds of NOx per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This NOx emission factor is specified in Table 1.4-1 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.h Emission Limitation:

10.07 tpy of NOx

Applicable Compliance Method:

The annual emission limitation is based on the hourly NOx emission rate for 8760 hrs/yr. Therefore, compliance with the hourly emission limitation constitutes compliance with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.i Emission Limitation:

0.04 lb/hr of PE

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner capacity of 23.5mmBtu, an emission factor of 1.9 pounds of particulates per million standard cubic feet and a heating value of 1020 Btu per standard cubic foot. This particulate emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(9).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.j Emission Limitation:

0.18 tpy of particulate emissions

Applicable Compliance Method

The annual emission limitation is based on the hourly PE emission rate for 8760 hrs/yr. Therefore, compliance with the hourly emission limitation constitutes compliance with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.k Emission Limitation:

0.01 lb/hr of SO2

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner capacity of 23.5 mmBtu, an emission factor of 0.6 pound of SO2 per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This SO2 emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-18-04(E).

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.l Emission Limitation:

0.04 tpy of SO₂

Applicable Compliance Method:

The annual emission limitation is based on the hourly SO₂ emission rate for 8760 hrs/yr. Therefore, compliance with the hourly emission limitation constitutes compliance with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.m Emission Limitation:

20% opacity as a six minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 using the methods and procedures specified in OAC rule 3745-17-03(B)(1). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[Authority for term: OAC rule 3745-77-07(C)(1)]

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limitation and the capture efficiency and control efficiency requirements for VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission limitation: for VOC, Method 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) If the permittee can demonstrate that the total permanent enclosure (including room dimensions, openings and air flows) did not change from the previous Method 204 test, a new complete test will not be required.

f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Facility Name: **Crown Cork & Seal Co. (USA) Inc. - Toledo**
Facility ID: **04-48-01-0466**
Emissions Unit: **66 inch coil coating line (K001)**

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

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: 2nd coater - 36 inch coil coating line (South Coater) (K004)

Activity Description: An additional coater and oven was installed in the existing 36 inch coil coating line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
36-inch coil coating line second coater with a 16 mmBtu/hr direct-fired natural gas drying oven controlled by a permanent total enclosure and a catalytic incinerator	OAC rule 3745-31-05(A)(3) (PTI 04-1059 as issued 11/27/01)	39.0 pounds per hour of volatile organic compounds (VOC), including emissions from cleanup materials
		170.9 tons per year of VOC, including emissions from cleanup materials
		0.42 pounds per hour of carbon monoxide (CO)
		1.7 tons per year of CO
		2.0 pounds per hour of nitrogen oxides (NOx)
		8.8 tons per year of NOx
		0.09 pound per hour of particulate emissions (PE)
		0.4 ton per year of PE
		0.01 pound per hour of sulfur dioxide (SO2)
		0.05 ton per year of SO2
		See A.I.2.a through A.I.2.c below.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-09(E), and 40 CFR Part 60, Subpart TT.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	40 CFR Part 60, Subpart TT	See A.I.2.d below.
	OAC rule 3745-17-07(A)(1)	See A.I.2.e below.
	OAC rule 3745-17-11(A)(2)	See A.I.2.f below.
	OAC rule 3745-18-06(A)	See A.I.2.f below.
	OAC rule 3745-21-08(B)	See A.I.2.h below.
	OAC rule 3745-21-09(E)	See A.I.2.g below.
	40 CFR Part 63, Subpart SSSS	See A.I.1.i. below

2. Additional Terms and Conditions

- 2.a** The permittee shall operate and maintain a permanent total enclosure and a catalytic incinerator to capture and control the VOC emissions.
- 2.b** The permittee shall maintain a minimum 90% overall control efficiency for the VOC emissions from this emissions unit.
- 2.c** The permanent total enclosure shall capture 100% of the VOC emitted by the coating applicator.
- 2.d** The permittee shall not allow or permit the discharge into the atmosphere of more than:
 - i. 0.14 kg of volatile organic compounds (VOC) per liter of coating solids (1.17 pounds of VOC per gallon of coating solids) for each calendar month; or
 - ii. 10 percent of the VOC applied for each calendar month (90 percent emission reduction), whichever is less restrictive.
- 2.e** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.g** The permittee shall not allow VOC emissions to exceed 4.0 pounds of VOC per gallon of solids as a daily volume-weighted average.
- 2.h** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 04-1059.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2. Additional Terms and Conditions (continued)

- 2.i The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart SSSS (See Part II sections A.1 through A.16).

II. Operational Restrictions

1. This emissions unit shall be totally enclosed such that all the VOC emissions are captured for venting to the catalytic incinerator. Compliance with the following criteria, as specified by USEPA Method 204, shall be met by the permittee:
 - a. any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator;
 - b. the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all the NDO's shall be at least 3,600 m/hr (200 fpm);
 - d. the differential pressure between the inside and outside of the enclosure shall not be less than 0.007 inch of water as a 3-hour average;
 - e. the direction of air flow through all NDO's shall be into the enclosure;
 - f. all access doors and windows whose areas are not included in section (b) and are not included in the calculations in section (c) shall be closed during routine operation of the process; and
 - g. all VOC emissions from the coating line must be captured and contained for discharge to the catalytic incinerator.

[Authority for term: OAC rule 3745-77-07(A)(1)]

2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(A)(1)]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record each day, all 3-hour blocks of time during which the permanent total enclosure was not maintained at an average differential pressure of at least 0.007 inch of water column whenever the emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. These devices shall have an accuracy of plus or minus 2.5 degrees Celsius or plus or minus 0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater, pursuant to the requirements specified in 40 CFR 60.464(c). The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be 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 each day:

- a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
- b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance; and
- c. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

3. The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating, as applied;
 - b. the pounds of VOC per gallon of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating;
 - c. the total uncontrolled VOC emissions from all coatings, in pounds per day;
 - d. the uncontrolled, daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings;
 - e. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the controlled VOC emission rate shall be calculated using (i) the daily volume-weighted VOC content recorded in accordance with paragraph (d) above and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);

[Authority for term: OAC rule 3745-77-07(C)(1)]

III. Monitoring and/or Record Keeping Requirements (continued)

- f. the name and identification of each cleanup material employed;
- g. the number of gallons of each cleanup material employed;
- h. the uncontrolled VOC content of each cleanup material, in pounds per gallon;
- i. the total uncontrolled VOC emissions from all cleanup materials, in pounds per day;
- j. the total number of hours the emissions unit was in operation;
- k. the average hourly uncontrolled VOC emissions from all coatings and cleanup materials, i.e., ((c)+(i))/(j), in pounds per hour (average);
- l. the average hourly controlled VOC emissions from all coatings and cleanup materials, in pounds per hour, calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance; and
- m. the daily average coating usage, in gallons per hour.

[Authority for term: OAC rule 3745-77-07(C)(1)]

4. The permittee shall collect and record the following information each month for this emissions unit:
- a. the calculated, controlled VOC emissions from all coatings and cleanup materials, in tons per month;
 - b. the rolling, 12-month summation of VOC emissions from all coatings and cleanup materials, in tons;
 - c. the total volume, in gallons, as applied, of all coatings employed;
 - d. the total volume, in gallons, of all cleanup materials employed;
 - e. the uncontrolled, monthly volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings; and
 - f. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the controlled VOC emission rate shall be calculated using (i) the monthly volume-weighted VOC content recorded in accordance with paragraph (e) above and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance).

[Authority for term: OAC rule 3745-77-07(C)(1)]

5. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the requirements contained in permit to install 04-1059, issued on September 10, 1997: sections A.III.2, A.III.3.a through g, and A.III.4. The monitoring and record keeping requirements contained in the above referenced permit to install are subsumed into the requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the permit to install.

[Authority for term: OAC rule 3745-77-07(C)(1)]

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure, when the emissions unit was in operation, was not maintained at an average differential pressure of at least 0.007 inch of water column.

[Authority for term: OAC rule 3745-77-07(C)(1)]

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each calendar month during which the calculated, controlled VOC emission rate exceeded 1.17 pounds of VOC per gallon of coating solids and the actual VOC emission rate for each such month.

[Authority for term: OAC rule 3745-77-07(C)(1)]

3. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

4. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

5. The permittee shall notify the Toledo Division of Environmental Services in writing of each daily record showing that the calculated, controlled VOC emission rate exceeded 4.0 pounds of VOC per gallon of solids. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

6. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the calculated, controlled VOC emission rate exceeded 39 lbs/hr, and the actual calculated, controlled VOC emission rate for each such day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

7. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitation for VOC.

[Authority for term: OAC rule 3745-77-07(C)(1)]

8. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the hourly coating and/or monthly cleanup material limitation(s).

[[Authority for term: OAC rule 3745-77-07(C)(1)]

9. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Authority for term: OAC rule 3745-77-07(C)(1)]

10. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the requirements contained in permit to install 04-1059, issued on September 10, 1997: sections A.IV.2. through A.IV.4. and sections A.IV.7. through A.IV.8. The reporting requirements contained in the above referenced permit to install are subsumed into the requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the permit to install.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements

1.a Emission Limitation:

0.14 kg of VOC per liter of coating solids (1.17 pounds of VOC per gallon of coating solids) for each calendar month, or 10 percent of the VOC's applied for each calendar month (90 percent emission reduction), whichever is less restrictive

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.3 and A.III.4, and the overall control efficiency determined during the most recent stack test which demonstrated compliance (98.7 weight percent based on stack testing performed on April 29, 1999). If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, and methods and procedures of OAC 3745-21-10(C) and 40 CFR Part 60.466.

USEPA Methods 24 and 24A shall be used to determine the VOC contents for coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

For Method 25, the sampling time for each of three runs is to be at least 60 minutes, and the minimum sampling volume is to be at least 0.003 dry standard cubic meter (DSCM); however, shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.b Emission Limitation:

4.0 pounds of VOC per gallon of solids as a daily volume-weighted average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.3, and the overall control efficiency determined during the most recent stack test which demonstrated compliance (94 weight percent based on stack testing performed on June 5, 2006). If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 Part 60, Appendix A and methods and procedures of OAC rule 3745-21-10(C).

USEPA Methods 24 and 24A shall be used to determine the VOC contents for coatings and clean-up materials. If, pursuant to section 4.3 Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24a cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation date for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternatives precision statement for Method 24 or 24A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.c Emission Limitation

39.0 lbs/hr of VOC

Applicable Compliance Method:

VOC from the coatings:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.3 and the overall control efficiency determined during the most recent stack test which demonstrated compliance (94 weight percent based on June 5, 2006 stack testing) if required, the permittee shall perform additional emissions tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, and methods and procedures of OAC rule 3745-21-10(C).

VOC from the ovens:

Compliance shall be demonstrated based upon the maximum burner capacity of 16 mmBtu/hr, an emission factor of 5.5 pounds of VOC per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This VOC emission factor is specified in Table 1.1-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, date 7/98.

If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 25 of 40 CFR Part 60, Appendix.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.d Emission Limitation:

170.9 tons of VOC per year

Applicable Compliance Method:

Compliance shall be demonstrated based upon a rolling 12-month summation of monthly emissions calculated in section A.III.3 and A.III.4.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.e Emission Limitation:

0.42 lb/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner capacity of 16mm, an emission factor of 84 pounds of CO per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This CO emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.f Emission Limitation:

1.7 tpy of CO

Applicable Compliance Method:

Compliance shall be demonstrate by multiplyingthe CO emission limitation, in lb/hr, by the annual hours of operation for emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.g Emission Limitation:

2.0 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner capacity of 16 mmBtu, an emission factor of 100 pounds of NOx per million standard cubic feet and heating value of 1020 Btu per standard cubic foot. This NOx emission factor is specified in Table 1.4-1 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, date 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified Method 7 of 40 CFR Part 60, Appendix.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.h Emission Limitation

8.8 tpy of NOx

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the NOx emission limitation, in lb/hr, by the annual hours operation for the emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.i Emission Limitation:

0.09 lb/hr of particulate emissioons

Applicable Compliance Method:

Compliance may be demonstrate based upon the maximum burner capacity of 16mmBtu, an emission factor of 1.9 pounds of particulated per million standard cubic feet and a heating value of 1020 Btu per standard cubic foot. This particulate emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrated compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(9).

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.j Emission Limitation

0.4 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the particulate emission limitation, in lb/hr, by the annual hours of operation for the emissions unit, and then dividing by 2000 lbs/ton

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.k Emission Limitation

0.01 lb/hr of SO₂

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner of 16 mmBTU, an emission factor of 0.6 pound of SO₂ per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This SO₂ emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-18-04(E).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.l Emission Limitation:

0.05 tpy of SO₂

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the SO₂ emission limitation, in lb/hr, by the annual hours of operation for the emissions unit, and then dividing by 2000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.m Emission Limitation

100% capture efficiency for VOC emissions

Applicable Compliance Method:

If required, the permittee shall perform additional emissions tests, conducted in accordance with USEPA Method 204 of 40 CFR Part 60, Appendix A and methods and procedures of OAC rule 3745-21-10(C).

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.n Emission Limitation:

90% overall control efficiency for the VOC emissions

Applicable Compliance Method:

If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, USEPA Methods 204 through 204F of 40 CFR Part 51, Appendix M and methods and procedures of OAC rule 3745-21-10(C).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.o Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity, as a six-minute, except as specified by rule.

Applicable Compliance Method:

When requested by the Ohio EPA, compliance with the above visible limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limitation and the capture efficiency and control efficiency requirements for VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission limitation: for VOC, Method 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) If the permittee can demonstrate that the total permanent enclosure (including room dimensions, openings and air flows) did not change from the previous Method 204 test, a new complete test will not be required.

f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Facility Name: **Crown Cork & Seal Co. (USA) Inc. - Toledo**
Facility ID: **04-48-01-0466**
Emissions Unit: **2nd coater - 36 inch coil coating line (South Coater) (K0)**

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

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: 36 inch coil coating line (North Coater) (K005)

Activity Description: 36 inch coil coating line with oven and catalytic incinerator installed under PTI 04-01277

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K005 - 36-inch coil coating line with a 12 mmBtu direct-fired natural gas drying oven controlled by a permanent total enclosure and a catalytic incinerator	OAC rule 3745-31-05(A)(3) (PTI 04-01277 issued 2/26/2002	14.02 lbs/hr of volatile organic compounds (VOC)
		61.5 tpy of VOC
		2.22 lbs/hr of carbon monoxide (CO)
		9.7 tpy of CO
		2.65 lbs/hr of nitrogen oxides (NOx)
		11.6 tpy of NOx
		0.05 lb/hr of particulate emissions (PE)
		0.22 tpy of PE
		0.02 lb/hr of sulfur dioxide (SO2)
		0.09 tpy of SO2
		See A.I.2.a through A.I.2.c below
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-08(B) and OAC rule 3745-23-06(B).
	40 CFR Part 60, Subpart TT	See A.2.d.
	OAC rule 3745-17-07(A)(1)	20% opacity, as a 6-minute average except as provided by rule
	OAC rule 3745-17-11(A)(2)	See A.2.d.
	OAC rule 3745-18-06(A)	See A.2.d.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-08(B)	See A.2.f
	OAC rule 3745-21-09(E)	See A.2.d.
	40 CFR Part 63, Subpart SSSS	See A.2.e.

2. Additional Terms and Conditions

- 2.b** The permittee shall not allow or permit the discharge into the atmosphere of more than 2 percent of the VOC applied for each calendar month (98 percent emission reduction)
- 2.c** The permanent total enclosure shall capture 100% of the VOC emitted by the coating applicator.
- 2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.e** The permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart SSSS (see Part II Sections A.1 through A.16)
- 2.f** The permittee has satisfied the "best available control techniques and operating practices" required to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete Paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SOP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

- 1.** This emissions unit shall be totally enclosed such that all the VOC emissions are captured for venting to the catalytic incinerator. Compliance with the following criteria, as specified by USEPA Method 204, shall be met by the permittee:
 - 1.a** any natural draft opening (NDO) shall be at least four equivalent opening diameters from each OC emitting point unless otherwise specified by the Administrator;
 - 1.b** the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four wall's, floor and ceiling;
 - 1.c** the average face velocity (FV) of air through all the NDO's shall be at least 3,600 m/hr (200 fpm);
 - 1.d** the differential pressure between the inside and outside of the enclosure shall not be less than 0.007 inch of water as a 3-hour average;
 - 1.e** the direction of air flow through all NDO's shall be into the enclosure; and
 - 1.f** all access doors and windows whose area's are not included in section A.II.1.b. and are not included in the calculations in section A.II.1.c shall be closed during routine operation of the process; and

II. Operational Restrictions (continued)

- 1.g** all VOC emissions from the coating line must be captured and contained for discharge to the catalytic incinerator.

[Authority for term: OAC rule 3745-77-07(A)(1)]

- 2.** The permittee shall only burn natural gas in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall operate and maintain monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 2.** The permittee shall collect and record each day, all 3-hour blocks of time during which the permanent total enclosure was a not maintained at an average differential pressure of a least 0.007 inch of water column whenever the emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 3.** The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measures and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. These devices shall have an accuracy of plus or minus 2.5 degrees Celsius or plus or minus 0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater, pursuant to the requirements specified in 40 CFR 60.464(c). The monitoring and recording device shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 4.** The permittee shall collect and record the following information each day;

4.a all 3-hour blocks of time (when the emission unit was in operations) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;

4.b all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was no less than 80 percent of the average temperature difference during the most recent emissions test that demonstrated the emissions unit was in compliance; and

4.c a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 5.** The permittee shall collect and record the following information each day for this emissions unit;

5.a the name and identification of each coating, as applied

5.b the pounds of VOC per gallon of coating, as applied, and the volume, as applied, of each coating;

5.c the total uncontrolled VOC emissions from all coatings, in pounds per day;

5.d the name and identification of each cleanup material employed;

III. Monitoring and/or Record Keeping Requirements (continued)

- 5.e the number of gallons of each cleanup material employed;
- 5.f the uncontrolled VOC content of each cleanup material, in pounds per gallon;
- 5.g the total uncontrolled VOC emissions from all cleanup materials, in pounds per day;
- 5.h the total number of hours the emissions unit was in operation;
- 5.i the average hourly uncontrolled VOC emissions from all coatings and cleanup materials, i.e., ((c) + (g))/(h), in pounds per hour (average); and
- 5.j the average hourly controlled VOC emissions from all coatings and cleanup materials, in pounds per hour, calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 6. The permittee shall collect and record the following information each month for this emissions unit:
 - 6.a the calculated, controlled VOC emissions from all coatings and cleanup materials, in tons per month
 - 6.b the rolling, 12 month summation of VOC emissions from all coatings and cleanup materials, in tons;

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 7. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

IV. Reporting Requirements

- 1. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure, when the emissions unit was in operation, was not maintained at an average differential pressure of at least 0.007 inch of water column.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 2. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 3. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all 3-hour of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- 4. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the calculated, controlled, combined VOC emission rate exceeded 14.02 lbs/hr, and the actual calculated, controlled VOC emission rate for each such day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

IV. Reporting Requirements (continued)

5. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12 -month emissions limitation for VOC.

[Authority for term: OAC rule 3745-77-07(C)(1)]

6. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

7. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements

1. Compliance with the emissions limitations in sections A.I.1 and A.I.2. of these terms and condition shall be determined accordance with the following methods:

- 1.a Emission limitation:

2 percent of the VOC's applied for each calendar month (98 percent emission reduction)

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.4 and the overall control efficiency determined during the most recent stack test which demonstrated compliance (97.6 weight percent based on stack testing performed on June 5, 2006). If required, the permittee shall perform additional emissions tests, conducted in accordance with USEPA Method 25 and Methods 204 through Method 204F of 40 CFR Part 60, Appendix A, and methods and procedures of OAC 3745-21-10(C) and 40 CFR Part 60.466

For Method 25, the sampling time for each of three runs is to be at least 60 minutes, and the minimum sampling volume is to be at least 0.003 dry standard meter (DSCM); however, shorter sampling times in smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator.

USEPA Methods 24 and 24A shall be used to determine the VOC contents for coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.b Emission Limitation

14.02 lbs/hr of VOC combined

Applicable Compliance Method:

VOC and HAPs from the coatings;

Compliance shall be determined based upon the record keeping requirements specified in section A.III.5 and the overall control efficiency determined during the most recent stack test which demonstrated compliance. If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, and methods and procedures of OAC rule 3745-21-10(C).

VOC from combustion sources

Compliance shall be demonstrated based upon the maximum burner capacity of 27 mmBtu/hr, an emission factor of 5.5 pounds of VOC per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This VOC emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution of Air Pollution Emission Factors, dated 7/98

If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.c Emission Limitation:

61.5 tons of VOC combined per year

Applicable Compliance Method:

Compliance shall be demonstrated based upon a rolling, summation of monthly emissions calculated in section A.III.6.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.d Emission Limitation :

2.22 lbs/hr of CO

Applicable Compliance Method:

Compliance shall be demonstrated based upon the maximum burner capacity of 27 mmBtu/hr, an emission factor of 84 pounds of CO per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This CO emissions factor is specified in Table 1.4-1 of USEPA reference document AP42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.e 9.7 tpy of CO

Applicable Compliance Method:

The 9.7 tpy emission limitation was developed by multiplying the 2.22 lbs/hr emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emissions limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.f Emission Limitation:

2.65 lbs/hr of NOx

Applicable Compliance Methods:

Compliance shall be demonstrated based upon the maximum burner capacity of 27 mmBtu, an emission factor of 100 pounds of NOx per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This NOx emission factor is specified in Table 1.4-1 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.g Emission Limitation:

11.6 tpy of NOx

Applicable Compliance Method:

The 11.6 tpy emission limitation was developed by multiplying the 2.65 lbs/hr emission rate by a maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with annual limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.h Emission Limitation

0.05 lb/hr of PE

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum burner capacity of 27 mmBtu/hr, an emission factor of 1.9 lbs of particulates per million standard cubic feet and a heating value of 1020 Btu per standard cubic foot. This particulate emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(9).

[Authority for term: OAC rule 3745-77-07(C)(1)]

V. Testing Requirements (continued)

1.i Emission Limitation

0.22 tpy of PE

Applicable Compliance Method:

The 0.22 tpy emission limitation was developed by multiplying the 0.05 lb/hr emission rate by a maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.j Emission Limitation:

0.02 lb/hr of SO₂

Applicable Compliance Methods

Compliance may be demonstrated based upon the maximum burner capacity of 27 mmBtu, an emission factor of 0.6 pounds of SO₂ per million standard cubic feet, and a heating value of 1020 Btu per standard cubic foot. This SO₂ emission factor is specified in Table 1.4-2 of USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 7/98. If required, the permittee shall also demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-18-07(E).

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.k Emission Limitation

0.09 tpy of SO₂

Applicable Compliance Method

The 0.09 tpy emission limitation was developed by multiplying the 0.02 lb/hr emission rate by a maximum operating schedule of 8760 hrs/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.l Emission Limitation

100% capture efficiency for the VOC emissions

Applicable Compliance Method:

Compliance shall be demonstrated by performing emission tests conducted in accordance with USEPA Method 204 of 40 CFR Part 60, Appendix A and methods and procedures of OAC rule 3745-21-10(C)

[Authority for term: OAC rule 3745-77-07(C)(1)]

1.m Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity, as a six-minute, except as specified by rule.

Applicable Compliance Method:

When requested by the Ohio EPA, compliance with the above visible limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

V. Testing Requirements (continued)

None

Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity, as a six-minute, except as specified by rule.

Applicable Compliance Method:

When requested by the Ohio EPA, compliance with the above visible limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 2.5 years of the effective date of this permit and 6 months prior the permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the mass emission limitation and the capture efficiency and control efficiency requirements for VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission limitation: for VOC, Method 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) If the permittee can demonstrate that the total permanent enclosure (including room dimensions, openings and air flows) did not change from the previous Method 204 test, a new complete test will not be required.
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

V. Testing Requirements (continued)

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

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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