



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

12/24/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

06-60-01-0006
AK Steel - Zanesville Works
David A Crowle
1724 Linden Avenue
Zanesville, OH 43701-2300

Dear David A Crowle:

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

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

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

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

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

Very truly yours,

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

cc: Southeast District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

| | | |
|-----------------------------|---------------------------------|----------------------------------|
| Issue Date: 12/24/02 | Effective Date: 01/14/02 | Expiration Date: 12/24/07 |
|-----------------------------|---------------------------------|----------------------------------|

This document constitutes issuance of a Title V permit for Facility ID: 06-60-01-0006 to:

AK Steel - Zanesville Works
1724 Linden Avenue
Zanesville, OH 43701-2300

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

| | | |
|---|---|--|
| B001 (#1 Boiler) Gas-fired Boiler - 52.5 MMBtu/hr | P001 (#4 HARD PICKLE) #4 HARD PICKLE | #2 STRIP ANNEAL |
| B002 (COAL-FIRED BOIL) COAL-FIRED BOIL | P003 (#1 SENDZIMIR MI) #1 SENDZIMIR MI | P010 (#7 COIL COATING) #7 COIL COATING |
| B003 (COAL FIRED BOIL) COAL FIRED BOIL | P006 (#6 STRIP ANNEAL) #6 STRIP ANNEAL | P011 (#15 COATING LINE) #8 COATING LINE |
| F001 (Plant Roadways & Parking Areas) Plant Roadways & Parking Areas | P008 (#1 ANNEAL & PIC) #1 ANNEAL & PIC | P012 (#1 STRIP ANNEAL) #1 STRIP ANNEAL |
| F002 (Coal & Ash Storage Piles) Storage Piles & Material Handling | P009 (#2 STRIP ANNEAL) | |

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

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

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

1. **Monitoring and Related Record Keeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c. The permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))
 - ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
 - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six

months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))

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

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

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

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

iii. **For monitoring, record keeping, and reporting requirements:**

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

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

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the

report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.
(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and

reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
 - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification

under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

17. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

18. Insignificant Activities

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

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

19. Permit to Install Requirement

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

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

20. Air Pollution Nuisance

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

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

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee

shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers, 40 CFR Part 63, Subpart DDDDD. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.
2. If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:
 - a. for a new affected source, the anticipated date of startup of operation;
 - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
 - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
 - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
 - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
 - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

The Part II application for a MACT determination may, but is not required to, contain the following information:

- a. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
- b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
- c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

A. State and Federally Enforcable Section (continued)

3. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:
- a. Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):
 - i. the name and mailing address of the permittee;
 - ii. the physical location of the source if it is different from the mailing address;
 - iii. identification of the relevant MACT standard and the source's compliance date;
 - iv. a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and
 - v. a statement confirming the facility is a major source for HAPs.
 - b. Unless otherwise specified in the relevant Subpart, within 60 days following completion of any required compliance demonstration activity specified in the relevant Subpart, the permittee shall submit a notification of compliance status that contains the following information:
 - i. the methods used to determine compliance;
 - ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
 - iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
 - iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in the relevant Subpart;
 - v. an analysis demonstrating whether the affected source is a major source or an area source;
 - vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
 - vii. a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

B. State Only Enforceable Section

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

B005 - 5 mmBtu/hr air make-up unit;
B006 - 5 mmBtu/hr air make-up unit;
T019 - 7500-gallon hydrofluoric acid storage tank;
Z001 - <10 sq. ft. surface area solvent degreasers;
Z002 - 5 mmBtu/hr air make-up unit;
Z003 - 5 mmBtu/hr air make-up unit;
Z004 - 5 mmBtu/hr air make-up unit;
Z005 - gasoline dispensing & storage tank;
Z006 - machine shop bearing cleaning unit;
Z007 - 5000-gallon no. 4 hard pickle monoaluminum phosphate tank;
Z008 - 25000-gallon no. 4 hard pickle used H₂SO₄/HF/HCl tank;
Z009 - 10000-gallon no. 4 hard pickle H₂SO₄ tank;
Z010 - 30000-gallon Z-mill waste oil tank;
Z011 - 10000-gallon Z-mill bulk oil tank;
Z012 - 25000-gallon no. 1 anneal & pickle urea tank;
Z013 - 15000-gallon no. 1 anneal & pickle HNO₃ tank;
Z014 - 30000-gallon no. 1 anneal & pickle H₂SO₄/HF tank;
Z015 - 40000-gallon no. 1 anneal & pickle used HNO₃/HF tank;
Z016 - 10000-gallon no. 1 anneal & pickle kolid liquid tank;
Z017 - 5000-gallon coaters monoaluminum phosphate tank;
Z018 - 12000-gallon coaters C-3 coreplate tank;
Z019 - 8000-gallon WWTP caustic soda tank;
Z020 - 9500-gallon reclaimed oil tank;
Z021 - 6700-gallon oily sludge tank;
Z022 - small gasoline and diesel dispensing facility; and
Z099 - miscellaneous natural gas combustion.

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: #1 Boiler (B001)
Activity Description: Gas-fired Boiler - 52.5 MMBtu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--------------------------------------|--|
| 52.5 mmBtu/hr natural gas-fired boiler | OAC rule 3745-17-10 | Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-18-06(A) | See A.I.2.a below. |

2. Additional Terms and Conditions

- 2.a OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

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

V. Testing Requirements

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

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required by this permit, but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04(A).

1.b Emission Limitation:

0.020 pound of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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> |
|---|---|--|
|---|---|--|

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: COAL-FIRED BOIL (B002)
Activity Description: COAL-FIRED BOIL

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|---|
| 35.4 mmBtu/hr Babcock & Wilcox coal-fired boiler vented to a mechanical collector | OAC rule 3745-17-10 | Particulate emissions shall not exceed 0.22 pound per mmBtu of actual heat input. |
| | OAC rule 3745-18-66(C) | Emissions of sulfur dioxide (SO ₂) from this emissions unit shall not exceed 6.1 pounds per mmBtu of actual heat input. |
| | OAC rule 3745-17-07(C) | See A.I.2.a below. |

2. Additional Terms and Conditions

- 2.a Pursuant to the provisions of paragraph (C) of OAC rule 3745-17-07, and as approved by the USEPA on 2/19/88, this facility is hereby granted the following equivalent visible emission limitation for this emissions unit in lieu of the visible emission limitation required under paragraph (A) of said rule:

This facility shall not cause or allow the discharge into the ambient air from any stack associated with this emissions unit any air contaminant of a shade or density greater than 35% opacity, but shall not exceed 60% opacity, as a 6-minute average, at any time.

II. Operational Restrictions

1. Emissions units B002 and B003 (boilers #2 and #3, respectively) shall be operated such that their combined average operating rate shall not exceed 48 mmBtu/hr for any calendar day. This operational restriction is currently part of the federally approved SIP, but it currently is not specified in State rules, OAC rule 3745-18-66 in particular. The Ohio EPA is planning to submit a SIP revision request to USEPA to remove this operational restriction from the federally approved SIP. Once that SIP revision request is approved by the USEPA, this operational restriction and the associated monitoring, record keeping, and reporting will no longer be applicable to the permittee.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall determine compliance with the allowable SO₂ emission limitation by either monthly composite sampling or monthly average fuel analysis in accordance with the procedures specified below.

If the permittee chooses to perform monthly composite sampling, the composite sample shall be composed of either periodic as-fired samples, with the collection frequency determined by the Director, or as-received samples with a minimum of one sample per truckload or carload. Compliance with the applicable SO₂ emission limit shall be determined based on the analysis of each monthly composite sample.

If the permittee chooses the monthly average fuel analysis approach, the monthly average fuel analysis shall be based on fuel supplier analyses. Fuel supplier analyses shall be obtained for each shipment received during the calendar month. Compliance with the applicable SO₂ emission limit shall be determined based on the weighted arithmetic average of all fuel supplier analyses for each calendar month.

The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the abnormal visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

3. The permittee shall maintain daily records of the combined average operating rate for emissions units B002 and B003, combined.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies of the permittee's monthly composite sample analyses or the fuel supplier's analyses (wet and/or dry) for each shipment of coal which is received for burning in this emissions unit. The permittee or coal supplier's analyses shall document the ash content (percent), sulfur content (percent), and heat content (Btu/pound) using either of the sampling methods noted in section A.III.1.

The following information shall also be included with the copies of the permittee's or coal supplier's analyses:

- a. the total quantity of coal received in each shipment (tons);
- b. the weighted* average ash content (percent) of the coal received during each calendar month;
- c. the weighted* average sulfur content (percent) of the coal received during each calendar month;
- d. the weighted* average heat content (Btu/pound) of the coal received during each calendar month; and
- e. the weighted* average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal received each calendar month.

* in proportion to the quantity of coal received in each shipment during the calendar month

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit deviation (excursion) reports that identify each day when the combined average operating rate for emissions units B002 and B003 exceeded 48 mmBtu/hr. These reports shall be submitted within 30 days after the occurrence.

V. Testing Requirements

1. Compliance with the emission limitations and the operational restriction in sections A.I.1 and A.II.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

0.22 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.2.

- 1.b Emission Limitation:

6.1 pounds of SO₂ per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

V. Testing Requirements (continued)

1.c Emission Limitation:

35% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. In accordance with OAC rule 3745-17-07(C), a new EVEL must be established each time a particulate emissions stack test is performed.

1.d Emission Limitation:

48 mmBtu/hr combined average operating rate

Applicable Compliance Method:

Compliance with the daily combined average operating rate of 48 mmBtu/hr for emissions units B002 and B003 shall be based upon the record keeping requirements specified in section A.III.3.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after issuance of the permit and annually thereafter until permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates.
- c. The permittee shall perform visible particulate observations in accordance with 40 CFR Part 60, Appendix A, Method 9 during each particulate test run.
- d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- e. The test(s) shall be conducted while B002 and B003 are operating at or near their combined maximum operating rate.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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> |
|---|---|--|
|---|---|--|

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: COAL FIRED BOIL (B003)
Activity Description: COAL FIRED BOIL

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|---|
| 35.4 mmBtu/hr Babcock & Wilcox coal-fired boiler vented to a mechanical collector | OAC rule 3745-17-10 | Particulate emissions shall not exceed 0.22 pound per mmBtu of actual heat input. |
| | OAC rule 3745-18-66(C) | Emissions of sulfur dioxide (SO ₂) from this emissions unit shall not exceed 6.1 pounds per mmBtu of actual heat input. |
| | OAC rule 3745-17-07(C) | See A.I.2.a below. |

2. Additional Terms and Conditions

- 2.a Pursuant to the provisions of paragraph (C) of OAC rule 3745-17-07, and as approved by the USEPA on 2/19/88, this facility is hereby granted the following equivalent visible emission limitation for this emissions unit in lieu of the visible emission limitation required under paragraph (A) of said rule:

This facility shall not cause or allow the discharge into the ambient air from any stack associated with this emissions unit any air contaminant of a shade or density greater than 35% opacity, but shall not exceed 60% opacity, as a 6-minute average, at any time.

II. Operational Restrictions

1. Emissions units B002 and B003 (boilers #2 and #3, respectively) shall be operated such that their combined average operating rate shall not exceed 48 mmBtu/hr for any calendar day. This operational restriction is currently part of the federally approved SIP, but it currently is not specified in State rules, OAC rule 3745-18-66 in particular. The Ohio EPA is planning to submit a SIP revision request to USEPA to remove this operational restriction from the federally approved SIP. Once that SIP revision request is approved by the USEPA, this operational restriction and the associated monitoring, record keeping, and reporting will no longer be applicable to the permittee.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall determine compliance with the allowable SO₂ emission limitation by either monthly composite sampling or monthly average fuel analysis in accordance with the procedures specified below.

If the permittee chooses to perform monthly composite sampling, the composite sample shall be composed of either periodic as-fired samples, with the collection frequency determined by the Director, or as-received samples with a minimum of one sample per truckload or carload. Compliance with the applicable SO₂ emission limit shall be determined based on the analysis of each monthly composite sample.

If the permittee chooses the monthly average fuel analysis approach, the monthly average fuel analysis shall be based on fuel supplier analyses. Fuel supplier analyses shall be obtained for each shipment received during the calendar month. Compliance with the applicable SO₂ emission limit shall be determined based on the weighted arithmetic average of all fuel supplier analyses for each calendar month.

The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the abnormal visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

3. The permittee shall maintain daily records of the combined average operating rate for emissions units B002 and B003, combined.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies of the permittee's monthly composite sample analyses or the fuel supplier's analyses (wet and/or dry) for each shipment of coal which is received for burning in this emissions unit. The permittee or coal supplier's analyses shall document the ash content (percent), sulfur content (percent), and heat content (Btu/pound) using either of the sampling methods noted in section A.III.1.

The following information shall also be included with the copies of the permittee's or coal supplier's analyses:

- a. the total quantity of coal received in each shipment (tons);
- b. the weighted* average ash content (percent) of the coal received during each calendar month;
- c. the weighted* average sulfur content (percent) of the coal received during each calendar month;
- d. the weighted* average heat content (Btu/pound) of the coal received during each calendar month; and
- e. the weighted* average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal received each calendar month.

* in proportion to the quantity of coal received in each shipment during the calendar month

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit deviation (excursion) reports that identify each day when the combined average operating rate for emissions units B002 and B003 exceeded 48 mmBtu/hr. These reports shall be submitted within 30 days after the occurrence.

V. Testing Requirements

1. Compliance with the emission limitations and the operational restriction in sections A.I.1 and A.II.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

0.22 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.2.

- 1.b Emission Limitation:

6.1 pounds of SO₂ per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

V. Testing Requirements (continued)

1.c Emission Limitation:

35% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. In accordance with OAC rule 3745-17-07(C), a new EVEL must be established each time a particulate emissions stack test is performed.

1.d Emission Limitation:

48 mmBtu/hr combined average operating rate

Applicable Compliance Method:

Compliance with the daily combined average operating rate of 48 mmBtu/hr for emissions units B002 and B003 shall be based upon the record keeping requirements specified in section A.III.3.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after issuance of the permit and annually thereafter until permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates.
- c. The permittee shall perform visible particulate observations in accordance with 40 CFR Part 60, Appendix A, Method 9 during each particulate test run.
- d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- e. The test(s) shall be conducted while B002 and B003 are operating at or near their combined maximum operating rate.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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> |
|---|---|--|
|---|---|--|

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: Plant Roadways & Parking Areas (F001)

Activity Description: Plant Roadways & Parking Areas

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|--|
| paved roadways and parking areas | OAC rule 3745-17-07(B)(4) | no visible particulate emissions except for 6 minutes during any 60-minute period |
| | OAC rule 3745-17-08(B), (B)(8), (B)(9) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.b through A.I.2.f) |
| unpaved roadways and parking areas | OAC rule 3745-17-07(B)(5) | no visible particulate emissions except for 13 minutes during any 60-minute period |
| | OAC rule 3745-17-08(B), (B)(2) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.h through A.I.2.k) |

2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways:

P1 - plant main road

P2 - paved road to engineering and stores

paved parking area:

P3 - employee parking to main gate

2. Additional Terms and Conditions (continued)

- 2.b** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and vacuuming at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d** The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
- unpaved roadways:
- U1 - gravel spur to #4 HP/waste water treatment delivery
- U2 - miscellaneous roadway for construction purposes
- unpaved parking areas:
- U3 - miscellaneous parking area for construction purposes
- 2.e** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with suitable dust suppressant at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas specified in OAC rule 3745-17-07(B)(4).
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each of the paved roadways and the parking area in accordance with the following frequencies:

paved roadways minimum inspection frequency

all weekly

paved parking area minimum inspection frequency

P2 weekly

2. Except as otherwise provided in this section, the permittee shall perform inspections of each of the unpaved roadways and the parking area in accordance with the following frequencies:

unpaved roadways minimum inspection frequency

all weekly

unpaved parking areas minimum inspection frequency

U4 weekly

3. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
4. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the inspections if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in section A.III.5.d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Emission Limitation:

no visible particulate emissions

Applicable Compliance Method:

Compliance with the emission limitation for the unpaved and paved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State 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> |
|---|---|--|
|---|---|--|

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: Coal & Ash Storage Piles (F002)
Activity Description: Storage Piles & Material Handling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|---|
| storage piles and material handling load-in and load-out of storage piles (see section A.2.a for identification of storage piles) | OAC rule 3745-17-07 | no visible emissions except for 13 minutes in any hour |
| | OAC rule 3745-17-08 | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.b, A.I.2.c and A.I.2.f) |
| storage piles and material handling wind erosion from storage piles (see section A.2.a for identification of storage piles) | OAC rule 3745-17-07(B)(6) | no visible emissions except for 13 minutes in any hour |
| | OAC rule 3745-17-08(B), (B)(6) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.d through A.I.2.f) |

2. Additional Terms and Conditions

- 2.a The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
 - coal storage pile #1
 - ash storage pile #1
- 2.b The permittee shall employ reasonably available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. To ensure compliance, the permittee shall minimize drop height and maintain good operating practices. Nothing in this paragraph shall prohibit the permittee from employing other control measures, including the use of water and/or other dust suppressants, to ensure compliance.
- 2.c Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation:

no visible particulate emissions

Acceptable Compliance Method:

Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

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> |
|---|---|--|
|---|---|--|

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: #4 HARD PICKLE (P001)
Activity Description: #4 HARD PICKLE

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---------------------------------------|--|
| #4 hard pickle line controlled with a wet scrubber | OAC rule 3745-17-11(B)(1) | Particulate emissions shall not exceed 28.4 lbs/hr from the #4 hard pickle line, MgO payoff reel section, and acid pickling section, combined. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |

2. Additional Terms and Conditions

- 2.a If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 28.4 lbs/hour, the permittee shall comply with the more stringent limitation.
- 2.b The wet scrubber serving the pickle tub shall be in operation at all times this emissions unit is in operation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

1.a Emission Limitation:

28.4 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.2.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required by this permit, but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04 (A).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates. Emission tests also shall be performed at the inlet of the control device for purposes of determining the uncontrolled mass rate of emissions (UMRE) and the allowable emission rate from Figure II of OAC rule 3745-17-11.

c. The following test methods shall be employed for the UMRE and to demonstrate compliance with the allowable mass emission rate: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The permittee shall perform visible particulate observations in accordance with 40 CFR Part 60, Appendix A, Method 9 during each particulate test run.

e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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> |
|---|---|--|
|---|---|--|

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: #1 SENDZIMIR MI (P003)
Activity Description: #1 SENDZIMIR MI

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|--|
| #1 Sendzimir mill vented to a cyclone | OAC rule 3745-17-11 | Particulate emissions shall not exceed 40 lbs/hr. |
| | OAC rule 3745-17-07 | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |

2. Additional Terms and Conditions

- 2.a If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 40 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
2. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:

40.0 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.2.

- 1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required by this permit, but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04 (A).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after issuance of the permit.

- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates. Emission tests also shall be performed at the inlet of the control device for purposes of determining the uncontrolled mass rate of emissions (UMRE) and the allowable emission rate from Figure II of OAC rule 3745-17-11. The inlet emission testing may be waived by the Southeast District Office if the permittee demonstrates to the satisfaction of the Southeast District Office that it is not technically feasible to perform the emission testing and that there are no available, accurate emission factors for this emissions unit, including emission factors that would be based upon test results from AK Steel's Coshocton facility.

- c. The following test methods shall be employed for the UMRE and to demonstrate compliance with the allowable mass emission rate: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. The permittee shall perform visible particulate observations in accordance with 40 CFR Part 60, Appendix A, Method 9 during each particulate test run.

- e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

- f. Should the uncontrolled emission rate be greater than 10 lbs/hr, the permittee shall conduct an emission test to demonstrate compliance with the allowable mass emission rate for particulates specified in section A.I.1 using the procedures in sections A.V.2.c and A.V.2.d.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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> |
|---|---|--|
|---|---|--|

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: #6 STRIP ANNEAL (P006)
Activity Description: #6 STRIP ANNEAL

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|---|
| #6 strip anneal line | OAC rule 3745-17-11 | none See A.I.2.a below. |
| | OAC rule 3745-17-07 | none See A.I.2.b below. |
| | OAC rule 3745-18-06(E)(2) | 132 lbs/hr of sulfur dioxide (SO ₂) See A.I.2.c below. |
| | | |

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c No monitoring, record keeping, or reporting is necessary because the only source of SO₂ emissions is from the combustion of natural gas and the SO₂ emissions from the combustion of natural gas is considered negligible.

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Facility Name: **AK Steel - Zanesville Works**

Facility ID: **06-60-01-0006**

Emissions Unit: **#6 STRIP ANNEAL (P006)**

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
|---|---|--|

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: #1 ANNEAL & PIC (P008)

Activity Description: #1 ANNEAL & PIC

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> |
|--|---------------------------------------|---|
| no. 1 annealing and pickling line vented to 2 packed tower wet scrubbers | OAC rule 3745-31-05 (PTI 06-4694) | 0.93 lb/hr of particulate emissions |
| | | 4.06 tpy of particulate emissions |
| | | 0.07 lb/hr of sulfur dioxide (SO ₂) |
| | | 0.31 tpy of SO ₂ |
| | | 0.33 lb/hr of volatile organic compounds (VOC) |
| | | 1.45 tpy of VOC |
| | | 58.99 lbs/hr of nitrogen oxides (NO _x) |
| | | 258 tpy of NO _x |
| | | 4.14 lbs/hr of carbon monoxide (CO) |
| | | 18.1 tpy of CO |
| | | 0.143 lb/hr of hydrogen fluoride (HF) |
| | | 0.63 tpy of HF |
| | | The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-21-08(B), and 3745-23-06(B). |
| | | See A.I.2.a below. |
| | OAC rule 3745-17-11 | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-18-06(E)(2) | See A.I.2.b below. |
| | OAC rule 3745-21-08(B) | See A.I.2.c below. |

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-23-06(B)

See A.I.2.c below.

2. Additional Terms and Conditions

- 2.a** The permittee shall employ low NOx burners, the addition of urea to pickling baths, and a packed bed scrubber to reduce NOx emissions whenever this emissions unit is in operation.
- 2.b** The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.
- 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 3745-23-06, 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 06-4694.

II. Operational Restrictions

- 1.** For the acid fume scrubber (Heil Process Co.), the pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water while the emissions unit is in operation.
- 2.** For the kolene scrubber (Enviroclear), the pressure drop across the scrubber shall be continuously maintained at a value of not less than 1 inch of water while the emissions unit is in operation.
- 3.** The permittee shall maintain the urea feed rate for each product type produced in this emissions unit at an hourly rate that is not less than the urea feed rate established during the most recent emission tests that demonstrated this emissions unit was in compliance with the hourly allowable NOx emission limitation of 58.99 lbs/hr.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across each scrubber, in inches of water; and
 - b. the downtimes for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- 2.** The permittee shall maintain monthly records of the following information:
 - a. the production rate, in tons;
 - b. the average hourly production rate, in tons/hour;
 - c. the total amount of natural gas employed by the emissions unit, in mmcf; and
 - d. the average hourly natural gas usage, calculated as follows:

mmcf/hr = the total amount of natural gas employed, in mmcf / the total hours of operation.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall maintain records of the following information for each run of each product type produced in this emissions unit:
 - a. the total amount of urea employed, in gallons;
 - b. the hours of operation for the product type run; and
 - c. the average hourly urea feed rate, in gallons/hour.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the static pressure drop across each scrubber was not maintained at or above the required level.
2. The permittee shall submit quarterly deviation (excursion) reports that identify any urea feed rate that did not comply with the operational restriction specified in section A.II.3.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation:

0.93 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated based upon the calculations specified below and the following emission factors as submitted in PTI 06-4694:

- i. 3.00 lbs/mmcf for the annealing furnace; and
- ii. 0.020 lb/ton for the pickling line (pickling and kolene combined).

The particulate emission factors were obtained from AP-42, 5th Edition, Volume I, Chapter 1, Section 1.4, Tables 1.4-1 and 1.4-2, dated January, 1995.

Annealing furnace natural gas emissions (lb/hr) = $E1 = (3.0 \text{ lbs/mmcf}) \times (\text{mmcf/hr})$.

Pickling and annealing emissions (lb/hr) = $E2 = (0.020 \text{ lb/ton}) \times (\text{tons of metal/hr})$.

Total emissions (lb/hr) = $E1 + E2$.

If required, compliance shall also be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.b Emission Limitation:

4.06 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

1.c Emission Limitation:

0.07 lb/hr of SO₂

Applicable Compliance Method:

Compliance may be demonstrated based upon the calculation specified below and the following emission factor as submitted in PTI 06-4694:

- i. 0.60 lb/mmcf for the annealing furnace.

The sulfur dioxide emission factor was obtained from AP-42, 5th Edition, Volume I, Chapter 1, Section 1.4, Table 1.4-1, dated July, 1998.

Annealing furnace natural gas emissions (lb/hr) = $(0.60 \text{ lb/mmcf}) \times (\text{mmcf/hr})$.

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 6.

V. Testing Requirements (continued)

1.d Emission Limitation:

0.31 tpy of SO₂

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

1.e Emission Limitation:

0.33 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated based upon the calculation specified below and the following emission factor as submitted in PTI 06-4694:

i. 5.50 lbs/mmcf for the annealing furnace.

The volatile organic compound emission factor was obtained from AP-42, 5th Edition, Volume I, Chapter 1, Section 1.4, Table 1.4-1, dated July, 1998.

Annealing furnace natural gas emissions (lb/hr) = (5.50 lbs/mmcf) x (mmcf/hr).

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 25.

1.f Emission Limitation:

1.45 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

1.g Emission Limitation:

58.99 lbs/hr of NO_x

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.2.

1.h Emission Limitation:

258.38 tpy of NO_x

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

V. Testing Requirements (continued)

1.i Emission Limitation:

4.14 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated based upon the calculation specified below and the following emission factor as submitted in PTI 06-4694:

i. 84.0 lbs/mmcf for the annealing furnace.

The carbon monoxide emission factor was obtained from AP-42, 5th Edition, Volume I, Chapter 1, Section 1.4, Table 1.4-1, dated July, 1998.

Annealing furnace natural gas emissions (lb/hr) = (84.0 lbs/mmcf) x (mmcf/hr).

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 10.

1.j Emission Limitation:

18.14 tpy of CO

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

1.k Emission Limitation:

0.143 lb/hr of HF

Applicable Compliance Method:

Compliance with the above emission limit was last demonstrated by a stack test conducted by the facility on September 13, 1995, resulting in HF emissions of 0.143 lb/hr.

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 26A.

1.l Emission Limitation:

0.63 tpy of HF

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

V. Testing Requirements (continued)

1.m Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the procedures specified in Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible particulate emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to establish the urea feed rate necessary to maintain compliance with the NO_x emission limitation during the production of each type of product and to demonstrate compliance with the allowable mass emission rate for NO_x.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for NO_x, Method 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The permittee shall record the total amount of urea employed and the average hourly urea feed rate during each emission test run for each type of product produced.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. As new product types are developed for production in this emissions unit, the permittee shall conduct emission tests for each new product type in accordance with the procedure specified in section A.V.2. Such emission tests shall be performed before routine production of the new product type begins.

Facility Name: **AK Steel - Zanesville Works**

Facility ID: **06-60-01-0006**

Emissions Unit: **#1 ANNEAL & PIC (P008)**

VI. Miscellaneous Requirements

1. The permittee is planning to pursue an administrative amendment of PTI 06-4694 to revise the hourly allowable CO and VOC emission limitations in section A.I.1 to reflect the most recent CO and VOC emission factors (July, 1998).

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> |
|---|---|--|
|---|---|--|

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: #2 STRIP ANNEAL (P009)

Activity Description: #2 STRIP ANNEAL

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> |
|---|--|---|
| #2 strip anneal and coating line | OAC rule 3745-31-05(A)(3) (PTI 06-5824) | 8.6 lbs/hr of volatile organic compounds (VOC) 37.7 tpy of VOC from this emissions unit |
| | OAC rule 3745-17-11 | none |
| | OAC rule 3745-17-07 | See A.I.2.a below. none |
| | OAC rule 3745-21-09(E) | See A.I.2.b below. use of a coating which does not exceed 2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents (see A.I.2.c) |
| | 40 CFR Part 60, Subpart TT | use of a coating which does not exceed 0.28 kilogram VOC per liter (kg VOC/l) of coating solids applied (see A.I.2.c) |

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|---|
| | 40 CFR Part 63, Subpart SSSS | <p>[63.5120] What emission standards must I meet?</p> <p>(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:</p> <p>(1) No more than 2 percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction); or</p> <p>(2) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period; or</p> <p>(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.</p> <p>(b) You must demonstrate compliance with one of these standards by following the applicable procedures in Sec. 63.5170.</p> |

2. Additional Terms and Conditions

- 2.a** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** The permittee is complying with this rule by ensuring that each coating employed complies with the VOC content limitation.

2. Additional Terms and Conditions (continued)

2.d [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.

2.e [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 Subpart SSSS provides cross references to 40 CFR Part 63, Subpart A, indicating the applicability of the General Provisions requirements to Subpart SSSS.

II. Operational Restrictions

1. [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 Sec. 63.5170(e)(1), you must meet the applicable operating limits specified in Table 1 of 40 CFR Part 63, Subpart SSSS titled, "Operating Limits if Using Add-on Control Devices and Capture System". You must establish the operating limits during the performance test according to the requirements in Sec. 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 of Subpart SSSS, 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 Sec. 63.8(f).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the line:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, expressed as:
 - i. pounds of VOC per gallon of coating, excluding water and exempt solvents; and
 - ii. kilogram of VOC per liter (kg VOC/l) of coating solids applied;
 - c. the total gallons of each coating employed, excluding water and exempt solvents;
 - d. the total hours of operation for the emissions unit;
 - e. the total VOC emissions, i.e., the sum of (b.i) x (c) for all coatings employed; and
 - f. the calculated average hourly VOC emissions, i.e., [(e) / (d)].
2. The permittee shall maintain records of the monthly VOC emissions from this emissions unit.
3. [63.5150]
If I use a control device to comply with the emission standards, what monitoring must I do?

(a) To demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device required to comply with Sec. 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.

III. Monitoring and/or Record Keeping Requirements (continued)

(2) Continuous emission monitoring system (CEMS). If you are demonstrating continuous compliance with the standards in Sec. 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 Sec. 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 Sec. 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 Sec. 63.5190(a)(1)(i) includes:

(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 Sec. 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 deg. Celsius, whichever is greater.

(ii) For an oxidizer other than a catalytic oxidizer, to demonstrate continuous compliance with the operating limit established according to Sec. 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 Sec. 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 Sec. 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.

III. Monitoring and/or Record Keeping Requirements (continued)

(4) Capture system monitoring. If you are complying with the requirements of the standards in Sec. 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 Sec. 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.

4. [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 Sec. 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 Sec. 63.10(b)(2) of all measurements needed to demonstrate compliance with this subpart, including:

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

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

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

(iv) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with Sec. 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 Sec. 63.5160(d), (e), and (f); and

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

(3) Records specified in Sec. 63.10(b)(3); and

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

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

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of a noncomplying coating (i.e., for VOC content). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the annual emission limitation for VOC.
3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the average hourly VOC emissions from this emissions unit exceeded 8.6 lbs/hr, and the actual average hourly VOC emissions for each such day.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
5. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

6. [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 Sec. 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 Sec. 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 Sec. 63.9(b), provided the same information is contained in the permit application as required by Sec. 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 Sec. 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 Secs. 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 Sec. 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.

IV. Reporting Requirements (continued)

(d) You must submit a Notification of Compliance Status as specified in Sec. 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 Sec. 63.5130.

(e) You must submit performance test reports as specified in Sec. 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 Sec. 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 Sec. 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 compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.5130(a) and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in Sec. 63.5130(a).

IV. Reporting Requirements (continued)

(ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in Sec. 63.5130(a).

(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 Sec. 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).

IV. Reporting Requirements (continued)

- (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.
 - (3) The date and time that each CEMS was out-of-control, including the information in Sec. 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.

V. Testing Requirements

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

- 1.a Emission Limitation:

2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1 of this permit. USEPA Method 24 shall be used to determine the VOC contents of the coatings.

V. Testing Requirements (continued)

1.b Emission Limitation:

0.28 kilogram of VOC per liter (kg VOC/l) of coating solids applied

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1 of this permit. USEPA Method 24 shall be used to determine the VOC contents of the coatings.

1.c Emission Limitation:

8.6 lbs/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements as specified in section A.III.1 of this permit.

1.d Emission Limitation:

37.7 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1 and shall be the sum of the 365 daily emission rates for the calendar year.

V. Testing Requirements (continued)

2. [63.5160]

What performance tests must I complete?

(a) If you use a control device to comply with the requirements of Sec. 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 Sec. 63.5150(a)(2); or

(2) You have received a waiver of performance testing under Sec. 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 Sec. 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.

V. Testing Requirements (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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 63.5120; or

(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.

V. Testing Requirements (continued)

(vii) Each performance test must consist of three separate runs, except as provided by Sec. 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 Sec. 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 40 CFR 63.5160.

(ix) For each run, determine the control device destruction or removal efficiency, DRE, using Equation 2 of 40 CFR 63.5160.

(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 40 CFR 63.5160.

(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 Sec. 63.5120, you must establish the applicable operating limits required by Sec. 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.

V. Testing Requirements (continued)

(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.

(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) through (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 Sec. 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 Sec. 63.8(f).

(e) Capture efficiency. If you are required to determine capture efficiency to meet the requirements of Sec. 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.

V. Testing Requirements (continued)

3. [63.5170]

How do I demonstrate compliance with the standards?

You must include all coating materials (as defined in Sec. 63.5110) used in the affected source when determining compliance with the applicable emission limit in Sec. 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 Sec. 63.5190(a), and you must report it in the next semiannual compliance report required in Sec. 63.5180.

(a) As-purchased compliant coatings. If you elect to use coatings that individually meet the organic HAP emission limit in Sec. 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 Sec. 63.5160(b) and the volume solids content in accordance with Sec. 63.5160(c).

(2) Combine these results using Equation 1 of 40 CFR 63.5170 and compare the result to the organic HAP emission limit in Sec. 63.5120(a)(2) to demonstrate that each coating material contains no more organic HAP than the limit.

(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 40 CFR 63.5170.

(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 40 CFR 63.5170.

(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 Sec. 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 Sec. 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.

V. Testing Requirements (continued)

(1) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 63.5150(a)(2).

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

V. Testing Requirements (continued)

(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.

V. Testing Requirements (continued)

- (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 Sec. 63.5160(b).
- (iii) Determine the volatile matter content of each coating material applied during the month following the procedure in Sec. 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 Sec. 63.5160(c).
- (v) For each solvent recovery device used to comply with Sec. 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 Sec. 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 40 CFR 63.5170.
- (viii) Organic HAP emitted, H_e . Calculate the mass of organic HAP emitted during the month, H_e , using Equation 5 of 40 CFR 63.5170.
- (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 40 CFR 63.5170.
- (x) Compare actual performance to performance required by compliance option. The affected source is in compliance with Sec. 63.5120(a) if it meets the requirement in either paragraph (e)(1)(x)(A) or (B) of this section:

V. Testing Requirements (continued)

(A) The average volatile organic matter collection and recovery efficiency, R_v , 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 Sec. 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 Sec. 63.5160, and the percent destruction or removal efficiency, DRE, of the control device can be calculated for each month using Equation 2 of Sec. 63.5160.

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

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

(iv) Control efficiency, R. Calculate the overall organic HAP control efficiency, R, achieved for each month using Equation 7 of 40 CFR 63.5170.

(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 Sec. 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 Sec. 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 of 40 CFR 63.5170.

(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 Sec. 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 Sec. 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.

V. Testing Requirements (continued)

(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 Sec. 63.5120(a), determine the oxidizer destruction or removal efficiency, DRE, using the procedure in Sec. 63.5160(d).

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

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

(iv) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with Sec. 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 Sec. 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 Sec. 63.5160(c).

V. Testing Requirements (continued)

(ix) Calculate the organic HAP emitted during the month, He, 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.

(xi) Compare actual performance to performance required by compliance option. The affected source is in compliance with Sec. 63.5120(a) if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in Sec. 63.5150(a)(3) for each 3-hour period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in Sec. 63.5150(a)(4) for each 3-hour period; and the requirement in either paragraph (f)(1)(xi)(A) or (B) of this section is met.

(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.

(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:

V. Testing Requirements (continued)

(i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in Sec. 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.

(3) Oxidizer using performance test and continuous monitoring of operating parameters compliance demonstration. For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through performance tests of capture efficiency, control device efficiency, and continuing compliance through continuous monitoring of capture system and control device operating parameters, each month of the 12-month compliance period you must meet the requirements of paragraphs (g)(3)(i) through (iii) of this section:

(i) Monitor an operating parameter established in Sec. 63.5150(a)(3) to ensure that control device destruction or removal efficiency is maintained; and

(ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in Sec. 63.5150(a)(4) to ensure capture efficiency; and

(iii) Determine the organic HAP emissions for those work stations served by each capture system delivering emissions to that oxidizer according to either paragraph (g)(3)(iii)(A) or (B) of this section:

(A) In accordance with paragraphs (f)(1)(i) through (v) and (ix) of this section if the work stations served by that capture system are only always-controlled work stations; or

(B) In accordance with paragraphs (f)(1)(i) through (v), (ix), 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.

(4) Oxidizer using continuous emission monitoring compliance demonstration. For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through an initial capture efficiency test, 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 in paragraphs (g)(4)(i) and (ii) of this section:

(i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in Sec. 63.5150(a)(4) to ensure capture efficiency; and

(ii) Determine the organic HAP emissions for those work stations served by each capture system delivering emissions to that oxidizer according to either paragraph (g)(4)(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 work 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.

V. Testing Requirements (continued)

- (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 40 CFR 63.5170. The organic HAP emitted from an uncontrolled work station is equal to the organic HAP applied on that work station:
- (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 Sec. 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 Sec. 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 Sec. 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 40 CFR 63.5170.
- (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, M_{Bi}.
- (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, M_{Bj}.
- (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, M_{CI}.

V. Testing Requirements (continued)

(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.

(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 40 CFR Part 63.5170.

(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, He, using Equation 11 of 40 CFR 63.5170.

(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 Sec. 63.5160(d).

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

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

VI. Miscellaneous Requirements

1. The permittee shall comply with the applicable General Provisions requirements specified in Table 2 of 40 CFR Part 63, Subpart SSSS titled, "Applicability of General Provisions to Subpart SSSS".

B. State 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> |
|---|---------------------------------------|--|
| #2 strip anneal and coating line | | |

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for this emissions unit (P009) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: DPM

TLV (ug/m3): 604,898

Maximum Hourly Emission Rate (lbs/hr): 3.30

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 91.93

MAGLC (ug/m3): 14,402

Pollutant: Butyl Carbitol

TLV (ug/m3): 662,163

Maximum Hourly Emission Rate (lbs/hr): 5.36

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 130.2

MAGLC (ug/m3):15,766

III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #7 COIL COATING (P010)

Activity Description: #7 COIL COATING

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|---|
| #7 coil coating & drying furnace line | OAC rule 3745-17-07(A) | See A.1.2.a below. |
| | OAC rule 3745-17-11 | See A.1.2.b below. |
| | OAC rule 3745-21-09(E) | use of a coating which does not exceed 2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents (see A.1.2.c) |

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|---|
| | 40 CFR Part 63, Subpart SSSS | <p>[63.5120] What emission standards must I meet?</p> <p>(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:</p> <p>(1) No more than 2 percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction); or</p> <p>(2) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period; or</p> <p>(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.</p> <p>(b) You must demonstrate compliance with one of these standards by following the applicable procedures in Sec. 63.5170.</p> |

2. Additional Terms and Conditions

- 2.a** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.c** The permittee is complying with this rule by ensuring that each coating employed complies with the VOC content limitation.

2. Additional Terms and Conditions (continued)

2.d [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.

2.e [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 Subpart SSSS provides cross references to 40 CFR Part 63, Subpart A, indicating the applicability of the General Provisions requirements to Subpart SSSS.

II. Operational Restrictions

1. [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 Sec. 63.5170(e)(1), you must meet the applicable operating limits specified in Table 1 of 40 CFR Part 63, Subpart SSSS titled, "Operating Limits if Using Add-on Control Devices and Capture System". You must establish the operating limits during the performance test according to the requirements in Sec. 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 of Subpart SSSS, 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 Sec. 63.8(f).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for the line:

a. the name and identification number of each coating, as applied; and

b. the VOC content of each coating (excluding water and exempt solvents), as applied.

III. Monitoring and/or Record Keeping Requirements (continued)

2. [63.5150]

If I use a control device to comply with the emission standards, what monitoring must I do?

(a) To demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device required to comply with Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 63.5190(a)(1)(i) includes:

(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.

III. Monitoring and/or Record Keeping Requirements (continued)

(3) Temperature monitoring of oxidizers. If you are complying with the requirements of the standards in Sec. 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 deg. Celsius, whichever is greater.

(ii) For an oxidizer other than a catalytic oxidizer, to demonstrate continuous compliance with the operating limit established according to Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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.

III. Monitoring and/or Record Keeping Requirements (continued)

3. [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 Sec. 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 Sec. 63.10(b)(2) of all measurements needed to demonstrate compliance with this subpart, including:

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

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

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

(iv) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with Sec. 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 Sec. 63.5160(d), (e), and (f); and

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

(3) Records specified in Sec. 63.10(b)(3); and

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

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

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

IV. Reporting Requirements (continued)

2. [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 Sec. 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 Sec. 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 Sec. 63.9(b), provided the same information is contained in the permit application as required by Sec. 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 Sec. 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 Secs. 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 Sec. 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.

IV. Reporting Requirements (continued)

(d) You must submit a Notification of Compliance Status as specified in Sec. 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 Sec. 63.5130.

(e) You must submit performance test reports as specified in Sec. 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 Sec. 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 Sec. 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 compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.5130(a) and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in Sec. 63.5130(a).

IV. Reporting Requirements (continued)

(ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in Sec. 63.5130(a).

(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 Sec. 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).

IV. Reporting Requirements (continued)

(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.

(3) The date and time that each CEMS was out-of-control, including the information in Sec. 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.

V. Testing Requirements

1. [63.5160]

What performance tests must I complete?

(a) If you use a control device to comply with the requirements of Sec. 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 Sec. 63.5150(a)(2); or

(2) You have received a waiver of performance testing under Sec. 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 Sec. 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.

V. Testing Requirements (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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 63.5120; or

(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.

V. Testing Requirements (continued)

(vii) Each performance test must consist of three separate runs, except as provided by Sec. 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 Sec. 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 40 CFR 63.5160.

(ix) For each run, determine the control device destruction or removal efficiency, DRE, using Equation 2 of 40 CFR 63.5160.

(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 40 CFR 63.5160.

(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 Sec. 63.5120, you must establish the applicable operating limits required by Sec. 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.

V. Testing Requirements (continued)

(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.

(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) through (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 Sec. 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 Sec. 63.8(f).

(e) Capture efficiency. If you are required to determine capture efficiency to meet the requirements of Sec. 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.

V. Testing Requirements (continued)

2. [63.5170]
How do I demonstrate compliance with the standards?

You must include all coating materials (as defined in Sec. 63.5110) used in the affected source when determining compliance with the applicable emission limit in Sec. 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 Sec. 63.5190(a), and you must report it in the next semiannual compliance report required in Sec. 63.5180.

(a) As-purchased compliant coatings. If you elect to use coatings that individually meet the organic HAP emission limit in Sec. 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 Sec. 63.5160(b) and the volume solids content in accordance with Sec. 63.5160(c).

(2) Combine these results using Equation 1 of 40 CFR 63.5170 and compare the result to the organic HAP emission limit in Sec. 63.5120(a)(2) to demonstrate that each coating material contains no more organic HAP than the limit.

(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 40 CFR 63.5170.

(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 40 CFR 63.5170.

(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 Sec. 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 Sec. 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.

V. Testing Requirements (continued)

(1) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 63.5150(a)(2).

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

V. Testing Requirements (continued)

(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.

V. Testing Requirements (continued)

- (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 Sec. 63.5160(b).
- (iii) Determine the volatile matter content of each coating material applied during the month following the procedure in Sec. 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 Sec. 63.5160(c).
- (v) For each solvent recovery device used to comply with Sec. 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 Sec. 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 40 CFR 63.5170.
- (viii) Organic HAP emitted, H_e . Calculate the mass of organic HAP emitted during the month, H_e , using Equation 5 of 40 CFR 63.5170.
- (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 40 CFR 63.5170.
- (x) Compare actual performance to performance required by compliance option. The affected source is in compliance with Sec. 63.5120(a) if it meets the requirement in either paragraph (e)(1)(x)(A) or (B) of this section:

V. Testing Requirements (continued)

(A) The average volatile organic matter collection and recovery efficiency, R_v , 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 Sec. 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 Sec. 63.5160, and the percent destruction or removal efficiency, DRE, of the control device can be calculated for each month using Equation 2 of Sec. 63.5160.

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

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

(iv) Control efficiency, R. Calculate the overall organic HAP control efficiency, R, achieved for each month using Equation 7 of 40 CFR 63.5170.

(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 Sec. 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 Sec. 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 of 40 CFR 63.5170.

(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 Sec. 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 Sec. 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.

V. Testing Requirements (continued)

(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 Sec. 63.5120(a), determine the oxidizer destruction or removal efficiency, DRE, using the procedure in Sec. 63.5160(d).

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

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

(iv) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with Sec. 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 Sec. 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 Sec. 63.5160(c).

V. Testing Requirements (continued)

(ix) Calculate the organic HAP emitted during the month, He, 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.

(xi) Compare actual performance to performance required by compliance option. The affected source is in compliance with Sec. 63.5120(a) if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in Sec. 63.5150(a)(3) for each 3-hour period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in Sec. 63.5150(a)(4) for each 3-hour period; and the requirement in either paragraph (f)(1)(xi)(A) or (B) of this section is met.

(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.

(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:

V. Testing Requirements (continued)

(i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in Sec. 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.

(3) Oxidizer using performance test and continuous monitoring of operating parameters compliance demonstration. For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through performance tests of capture efficiency, control device efficiency, and continuing compliance through continuous monitoring of capture system and control device operating parameters, each month of the 12-month compliance period you must meet the requirements of paragraphs (g)(3)(i) through (iii) of this section:

(i) Monitor an operating parameter established in Sec. 63.5150(a)(3) to ensure that control device destruction or removal efficiency is maintained; and

(ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in Sec. 63.5150(a)(4) to ensure capture efficiency; and

(iii) Determine the organic HAP emissions for those work stations served by each capture system delivering emissions to that oxidizer according to either paragraph (g)(3)(iii)(A) or (B) of this section:

(A) In accordance with paragraphs (f)(1)(i) through (v) and (ix) of this section if the work stations served by that capture system are only always-controlled work stations; or

(B) In accordance with paragraphs (f)(1)(i) through (v), (ix), 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.

(4) Oxidizer using continuous emission monitoring compliance demonstration. For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through an initial capture efficiency test, 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 in paragraphs (g)(4)(i) and (ii) of this section:

(i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in Sec. 63.5150(a)(4) to ensure capture efficiency; and

(ii) Determine the organic HAP emissions for those work stations served by each capture system delivering emissions to that oxidizer according to either paragraph (g)(4)(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 work 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.

V. Testing Requirements (continued)

- (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 40 CFR 63.5170. The organic HAP emitted from an uncontrolled work station is equal to the organic HAP applied on that work station:
- (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 Sec. 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 Sec. 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 Sec. 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 40 CFR 63.5170.
- (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, M_{Bi}.
- (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, M_{Bj}.
- (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, M_{CI}.

V. Testing Requirements (continued)

(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.

(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 40 CFR Part 63.5170.

(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, He, using Equation 11 of 40 CFR 63.5170.

(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 Sec. 63.5160(d).

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

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

VI. Miscellaneous Requirements

1. The permittee shall comply with the applicable General Provisions requirements specified in Table 2 of 40 CFR Part 63, Subpart SSSS titled, "Applicability of General Provisions to Subpart SSSS".

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> |
|---|---|--|
|---|---|--|

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: #15 COATING LINE (P011)

Activity Description: #8 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> |
|---|--|--|
| #15 coil coating & drying furnace line controlled with a baghouse | OAC rule 3745-31-05(A)(3) (PTI 06-06443) | The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B)(3). |
| | | Particulate emissions shall not exceed 0.025 grain per dry standard cubic foot (equivalent to 2.6 pounds per hour at maximum air flow rate) of exhaust gases or there shall be no visible particulate emissions, whichever is less stringent. Total particulate emissions from the baghouse shall not exceed 11.3 tons per year. |
| | | See A.I.2.g below. |
| | OAC rule 3745-17-07(A) | See A.I.2.a below. |
| | OAC rule 3745-17-11 | See A.I.2.b below. |
| | OAC rule 3745-21-09(E) | use of a coating which does not exceed 2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents |
| | | See A.I.2.c below. |
| | OAC rule 3745-17-08(B)(3) | See A.I.2.d below. |
| | OAC rule 3745-17-07(B)(1) | The visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-18-06(E)(2) | 110.73 lbs/hr of sulfur dioxide (SO ₂) |
| | See A.I.2.e below. | |
| OAC rule 3745-21-08(B) | See A.I.2.f below. | |

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|---|
| | OAC rule 3745-23-06(B) 40 CFR Part 63, Subpart SSSS | <p>See A.I.2.f below.</p> <p>[63.5120] What emission standards must I meet?</p> <p>(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:</p> <p>(1) No more than 2 percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction); or</p> <p>(2) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period; or</p> <p>(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.</p> <p>(b) You must demonstrate compliance with one of these standards by following the applicable procedures in Sec. 63.5170.</p> |

2. Additional Terms and Conditions

- 2.a** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.c** The permittee is complying with this rule by ensuring that each coating employed complies with the VOC content limitation.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
- i. the installation and use of hoods, fan, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust to the baghouse; and
 - ii. a collection efficiency that is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- 2.e** No monitoring, record keeping, or reporting is necessary because the only source of SO₂ emissions is from the combustion of natural gas and the SO₂ emissions from the combustion of natural gas is considered negligible.
- 2.f** 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 3745-23-06, 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 06-06443.
- 2.g** The coils employed on this coating line are covered with magnesium oxide to prevent rust from forming on the metal. When the coils are uncoiled, the magnesium oxide can be released into the air as fugitive dust. A vacuum system is employed with various pick-up points to vent the uncoiling area to a baghouse. The vacuum system and the baghouse shall be employed whenever a coil is uncoiled in preparation for coating in this emissions unit. Exhaust from the baghouse serving this emissions unit is currently vented into the building. This is the normal operating mode for this emissions unit.
- 2.h** [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.

2. Additional Terms and Conditions (continued)

2.i [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 Subpart SSSS provides cross references to 40 CFR Part 63, Subpart A, indicating the applicability of the General Provisions requirements to Subpart SSSS.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.05 to 4.0 kPa of water while the emissions unit is in operation.

2. [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 Sec. 63.5170(e)(1), you must meet the applicable operating limits specified in Table 1 of 40 CFR Part 63, Subpart SSSS titled, "Operating Limits if Using Add-on Control Devices and Capture System". You must establish the operating limits during the performance test according to the requirements in Sec. 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 of Subpart SSSS, 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 Sec. 63.8(f).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions from the baghouse and for visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

3. The permittee shall maintain a monthly record of the hours of operation for this emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall collect and record the following information each month for the line:

- a. the name and identification number of each coating, as applied; and
- b. the VOC content of each coating (excluding water and exempt solvents), as applied.

5. [63.5150]

If I use a control device to comply with the emission standards, what monitoring must I do?

(a) To demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device required to comply with Sec. 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.

III. Monitoring and/or Record Keeping Requirements (continued)

(2) Continuous emission monitoring system (CEMS). If you are demonstrating continuous compliance with the standards in Sec. 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 Sec. 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 Sec. 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 Sec. 63.5190(a)(1)(i) includes:

(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 Sec. 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 deg. Celsius, whichever is greater.

(ii) For an oxidizer other than a catalytic oxidizer, to demonstrate continuous compliance with the operating limit established according to Sec. 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 Sec. 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 Sec. 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.

III. Monitoring and/or Record Keeping Requirements (continued)

(4) Capture system monitoring. If you are complying with the requirements of the standards in Sec. 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 Sec. 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.

6. [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 Sec. 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 Sec. 63.10(b)(2) of all measurements needed to demonstrate compliance with this subpart, including:

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

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

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

(iv) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with Sec. 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 Sec. 63.5160(d), (e), and (f); and

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

(3) Records specified in Sec. 63.10(b)(3); and

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

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

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the baghouse and/or building egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. [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 Sec. 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 Sec. 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 Sec. 63.9(b), provided the same information is contained in the permit application as required by Sec. 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 Sec. 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 Secs. 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 Sec. 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.

IV. Reporting Requirements (continued)

(d) You must submit a Notification of Compliance Status as specified in Sec. 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 Sec. 63.5130.

(e) You must submit performance test reports as specified in Sec. 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 Sec. 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 Sec. 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 compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.5130(a) and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in Sec. 63.5130(a).

IV. Reporting Requirements (continued)

(ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in Sec. 63.5130(a).

(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 Sec. 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).

IV. Reporting Requirements (continued)

- (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.
 - (3) The date and time that each CEMS was out-of-control, including the information in Sec. 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.

V. Testing Requirements

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

- 1.a Emission Limitation:

particulate matter emission limit of 0.025 grain per dry standard cubic foot

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in section A.V.2.

V. Testing Requirements (continued)

1.b Emission Limitation:

no visible emission limit for the exhaust from the dust collector

Applicable Compliance Method:

Compliance with the no visible emission limit for the exhaust from the dust collector shall be determined using Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of Test Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)

1.c Emission Limitation:

9.4 tons per year of particulate emissions

Applicable Compliance Method:

Compliance with the particulate matter emission limit of 9.4 tons per year shall be determined in accordance with the following equation:

tons PM/year = (0.025 gr/dscf) X (10,000 dscf/min) X (lb/7000 gr) X (60 min/hour) X (ton/2000 lbs) X (actual hours of operation/year)

The flow rate of 10,000 dscf/min represents the maximum flow rate of exhaust gases from the control equipment, based on company data.

No testing or record keeping is specifically required to demonstrate compliance with this emission limitation, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

1.d Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and OAC rule 3745-17-03(B)(3).

1.e Emission Limitation:

use of a coating which does not exceed 2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirement specified in section A.III.4.

V. Testing Requirements (continued)

2. [63.5160]

What performance tests must I complete?

(a) If you use a control device to comply with the requirements of Sec. 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 Sec. 63.5150(a)(2); or

(2) You have received a waiver of performance testing under Sec. 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 Sec. 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.

V. Testing Requirements (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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 63.5120; or

(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.

V. Testing Requirements (continued)

(vii) Each performance test must consist of three separate runs, except as provided by Sec. 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 Sec. 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 40 CFR 63.5160.

(ix) For each run, determine the control device destruction or removal efficiency, DRE, using Equation 2 of 40 CFR 63.5160.

(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 40 CFR 63.5160.

(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 Sec. 63.5120, you must establish the applicable operating limits required by Sec. 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.

V. Testing Requirements (continued)

(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.

(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) through (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 Sec. 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 Sec. 63.8(f).

(e) Capture efficiency. If you are required to determine capture efficiency to meet the requirements of Sec. 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.

V. Testing Requirements (continued)

3. [63.5170]

How do I demonstrate compliance with the standards?

You must include all coating materials (as defined in Sec. 63.5110) used in the affected source when determining compliance with the applicable emission limit in Sec. 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 Sec. 63.5190(a), and you must report it in the next semiannual compliance report required in Sec. 63.5180.

(a) As-purchased compliant coatings. If you elect to use coatings that individually meet the organic HAP emission limit in Sec. 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 Sec. 63.5160(b) and the volume solids content in accordance with Sec. 63.5160(c).

(2) Combine these results using Equation 1 of 40 CFR 63.5170 and compare the result to the organic HAP emission limit in Sec. 63.5120(a)(2) to demonstrate that each coating material contains no more organic HAP than the limit.

(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 40 CFR 63.5170.

(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 40 CFR 63.5170.

(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 Sec. 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 Sec. 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.

V. Testing Requirements (continued)

(1) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 Sec. 63.5150(a)(2).

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

V. Testing Requirements (continued)

(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.

V. Testing Requirements (continued)

- (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 Sec. 63.5160(b).
- (iii) Determine the volatile matter content of each coating material applied during the month following the procedure in Sec. 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 Sec. 63.5160(c).
- (v) For each solvent recovery device used to comply with Sec. 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 Sec. 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 40 CFR 63.5170.
- (viii) Organic HAP emitted, H_e . Calculate the mass of organic HAP emitted during the month, H_e , using Equation 5 of 40 CFR 63.5170.
- (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 40 CFR 63.5170.
- (x) Compare actual performance to performance required by compliance option. The affected source is in compliance with Sec. 63.5120(a) if it meets the requirement in either paragraph (e)(1)(x)(A) or (B) of this section:

V. Testing Requirements (continued)

(A) The average volatile organic matter collection and recovery efficiency, R_v , 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 Sec. 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 Sec. 63.5160, and the percent destruction or removal efficiency, DRE, of the control device can be calculated for each month using Equation 2 of Sec. 63.5160.

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

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

(iv) Control efficiency, R. Calculate the overall organic HAP control efficiency, R, achieved for each month using Equation 7 of 40 CFR 63.5170.

(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 Sec. 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 Sec. 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 of 40 CFR 63.5170.

(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 Sec. 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 Sec. 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.

V. Testing Requirements (continued)

(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 Sec. 63.5120(a), determine the oxidizer destruction or removal efficiency, DRE, using the procedure in Sec. 63.5160(d).

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

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

(iv) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with Sec. 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 Sec. 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 Sec. 63.5160(c).

V. Testing Requirements (continued)

(ix) Calculate the organic HAP emitted during the month, He, 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.

(xi) Compare actual performance to performance required by compliance option. The affected source is in compliance with Sec. 63.5120(a) if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in Sec. 63.5150(a)(3) for each 3-hour period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in Sec. 63.5150(a)(4) for each 3-hour period; and the requirement in either paragraph (f)(1)(xi)(A) or (B) of this section is met.

(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.

(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:

V. Testing Requirements (continued)

(i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in Sec. 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.

(3) Oxidizer using performance test and continuous monitoring of operating parameters compliance demonstration. For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through performance tests of capture efficiency, control device efficiency, and continuing compliance through continuous monitoring of capture system and control device operating parameters, each month of the 12-month compliance period you must meet the requirements of paragraphs (g)(3)(i) through (iii) of this section:

(i) Monitor an operating parameter established in Sec. 63.5150(a)(3) to ensure that control device destruction or removal efficiency is maintained; and

(ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in Sec. 63.5150(a)(4) to ensure capture efficiency; and

(iii) Determine the organic HAP emissions for those work stations served by each capture system delivering emissions to that oxidizer according to either paragraph (g)(3)(iii)(A) or (B) of this section:

(A) In accordance with paragraphs (f)(1)(i) through (v) and (ix) of this section if the work stations served by that capture system are only always-controlled work stations; or

(B) In accordance with paragraphs (f)(1)(i) through (v), (ix), 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.

(4) Oxidizer using continuous emission monitoring compliance demonstration. For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through an initial capture efficiency test, 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 in paragraphs (g)(4)(i) and (ii) of this section:

(i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in Sec. 63.5150(a)(4) to ensure capture efficiency; and

(ii) Determine the organic HAP emissions for those work stations served by each capture system delivering emissions to that oxidizer according to either paragraph (g)(4)(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 work 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.

V. Testing Requirements (continued)

- (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 40 CFR 63.5170. The organic HAP emitted from an uncontrolled work station is equal to the organic HAP applied on that work station:
- (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 Sec. 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 Sec. 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 Sec. 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 40 CFR 63.5170.
- (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.

V. Testing Requirements (continued)

(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.

(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 40 CFR Part 63.5170.

(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, He, using Equation 11 of 40 CFR 63.5170.

(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 Sec. 63.5160(d).

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

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

VI. Miscellaneous Requirements

1. The permittee shall comply with the applicable General Provisions requirements specified in Table 2 of 40 CFR Part 63, Subpart SSSS titled, "Applicability of General Provisions to Subpart SSSS".

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> |
|---|---|--|
|---|---|--|

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: #1 STRIP ANNEAL (P012)
Activity Description: #1 STRIP ANNEAL

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|---|
| #1 strip anneal line | OAC rule 3745-17-11 | none See A.I.2.a below. |
| | OAC rule 3745-17-07 | none See A.I.2.b below. |
| | OAC rule 3745-18-06(E)(2) | 118.2 lbs/hr of sulfur dioxide (SO ₂) See A.I.2.c below. |
| | | |

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c No monitoring, record keeping, or reporting is necessary because the only source of SO₂ emissions is from the combustion of natural gas and the SO₂ emissions from the combustion of natural gas is considered negligible.

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Facility Name: **AK Steel - Zanesville Works**

Facility ID: **06-60-01-0006**

Emissions Unit: **#1 STRIP ANNEAL (P012)**

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
|---|---|--|

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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