OhioEPA

State of Ohio Environmental Protection Agency

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

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

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

08/18/03

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

14-09-01-0006
AK Steel Corporation
Steven L. Francis
1801 Crawford Street
Middletown, OH 45042

Dear Steven L. Francis:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Hamilton County Dept. of Environmental Services within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled. **In order to facilitate our review of all the comments or concerns you may have with the enclosed draft permit, please provide a hand marked-up copy of the draft permit showing the changes you think are necessary, along with any additional summary comments, by the end of the draft public comment period. The hard marked-up copy and any additional summary comments should be submitted to the Ohio EPA District Office or local air agency identified below and to this office at the following address:**

Ohio EPA, Division of Air Pollution Control
Permit Issuance and Data Management Section
Draft Title V Permit Correspondence
122 South Front Street
Columbus, Ohio 43215

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions concerning this draft Title V permit, please contact Hamilton County Dept. of Environmental Services.

Sincerely,

Michael W. Ahern

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

cc: USEPA (electronically submitted)
File, DAPC PMU
Hamilton County Dept. of Environmental Services
Indiana
Kentucky

State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 08/18/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 14-09-01-0006 to:

AK Steel Corporation
1801 Crawford Street
Middletown, OH 45043-0001

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

B007 (Boiler No.1,No.2 BH)
Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

B008 (Boiler No.4,No.2 BH)
Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

B009 (Boiler No.3,No.2 BH)
Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

B010 (Boiler No.2,No.2 BH)
Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

B021 (No. 84 Anneal)
No. 84 Anneal is a batch annealing of cold rolled steel coils operation.

B022 (Open Coil Anneal)
Open Coil Anneal is a batch annealing of cold rolled steel coils operation.

B023 (No. 64 Anneal)
No. 64 Anneal is a batch annealing of cold rolled steel coils operation.

B026 (No. 94 Anneal)
No. 94 Anneal is a batch annealing of cold rolled steel coils operation.

B918 (No.2 Coke Plant)
Wilputte Underjet 76-oven Coke Battery produces coke and various coke by-products.

F001 (Roads & Park. Areas)
This includes unpaved roads, paved roads, and parking lots which are treated for dust suppression.

F002 (RM Storage Piles)
Material storage piles throughout the facility. Surface area of all piles is approx. 1,830,000 sq ft.

F003 (Coal Hand.-No.2CP)
This includes part of the metallurgical coal handling system for the Wilputte Coke Battery (No. 2 Coke Plant).

F004 (Still Coal Handling)
Still Coal handling (now used to feed the No. 2 Coke Plant)

F005 (Coke Hand.-No.2 CP)
This includes the coke handling facility for the No. 2 Coke Plant.

F008 (Ore Screen. & Hand.)
This includes the ore screening and handling facility.

F010 (Iron Ore Unloading)
This includes the railcar, truck dump, conveyors and transfer station for the conveyance of ore.

F011 (BOF Deslagger)
The molten iron deslagging operation is used to remove slag off of the hot metal ladle.

F012 (BF Raw Matls Hand.)
This includes the coke, iron ore, dolomite, and sinter handling equipment for No. 3 Blast Furnace.

F015 (Slab Scarfing/Slitting)
This includes the hand scarfing and slitting of steel slabs.

F020 (Landfill)
The disposal of nonhazardous sludges and flue dust occurs here.

G001 (Plantwide Gasoline)
This is the Pickler Bldg, BOF, and Main Garage diesel and gasoline dispensing facilities.

K001 (Shops Spray Paint.)
This is a miscellaneous metal parts spray painting operation.

P009 (No. 3 Slab Fce/WHB)
Davy International walking beam slab reheat furnace reheats steel slabs, associated waste heat boiler

P010 (No. 2 Slab Fce/WHB)
Davy International walking beam slab reheat furnace reheats steel slabs, associated waste heat boiler

P011 (No. 1 Slab Fce/WHB)
Salem pusher slab reheat furnace reheats steel slabs, associated waste heat boiler

P012 (No. 4 Slab Fce/WHB)
Davy International walking beam slab reheat furnace reheats steel slabs, associated waste heat boiler

P019 (No. 4 Coating Line)
The No. 4 Coating Line is an aluminum coating of steel coils operation.

P022 (No. 3 Coating Line)
The No. 3 Coating Line is a zinc coating of steel coils operation.

P023 (No. 5 Pickler)
The Wean Unique HCI Pickler is used to remove scale from hot rolled steel.

P024 (No. 4 Pickler)
The Wean Unique HCI Pickler is used to remove scale from hot rolled steel.

P043 (Wilp.Quench Tower)
This is the quenching of hot coke operation.

P047 (NMT/Desulf. Station)
This is a combination hot metal pouring and desulfurization facility.

P049 (Terne Coat Line)
The Terne Coat Line is a terne (92% lead, 8% tin) or terne-nickel coating of steel coils operation.

P062 (No. 2 EG Line)
This is an electrolytic zinc coating or zinc-nickel coating of steel coils operation.

P065 (No. 3 Cold Mill)
The United 5 Stand Tandem Cold Mill is a cold rolling steel operation.

P067 (Gas Holder/Flare)
The gas holder/flare is used to flare excess coke oven gas.

P068 (Wilp. Exhausters)
The two Wilputte exhausters for the coke oven gas distribution throughout the by-products facility

P070 (FC, WO Tanks & Dec)
This includes the final cooler, wash oil tanks and decanter within the by-products.

P075 (Wilp. Tar & FL Vess.)
This includes the Wilputte tar and flushing liquor processing vessels within the by-products.

P087 (EP Roll Shop SB1)
Rolls are blasted and polished at this operation.

P088 (EP Roll Shop SB2)
Rolls are blasted and polished at this operation.

P089 (CSM Roll Shop SB)
Rolls are blasted and polished at this operation.

P901 (Flux Handling)
This includes the unloading and conveying of flux material to the BOF.

P902 (Continuous Caster)

Molten steel is continuous cast into steel slabs at this operation.

P925 (No. 3 Blast Furnace)
Arthur G. McKee unique blast furnace produces hot metal.

P926 (No. 15 Vessel)
The No. 15 basic oxygen furnace produces molten steel.

P927 (No. 16 Vessel)
The No. 16 basic oxygen furnace produces molten steel.

P934 (CAS/OB)
This is a steel refining station using argon stirring and oxygen blowing for certain steel grades.

P935 (Vacuum Degasser)
The vacuum degassing system is a molten steel refining station for certain steel grades.

P956 (Desul. Station)
This is a spare desulfurization facility used during routine maintenance of the main operation.

T002 (E.Tar Storage Tank)
The east tar storage tank is used to store tar, a coke by-product.

Z001 (H Ladle Preheater 1)
The No. 1 Stelter & Brinck horizontal ladle preheater is used to preheat steel ladles.

Z002 (H Ladle Preheater 2)
The No. 2 Stelter & Brinck horizontal ladle preheater is used to preheat steel ladles.

Z003 (H Ladle Preheater 3)
The No. 3 Stelter & Brinck horizontal ladle preheater is used to preheat steel ladles.

Z004 (V Ladle Preheater)
The Stelter & Brinck vertical ladle preheater is used to preheat steel ladles.

Z005 (Tundish Preheater1)
The No. 1 Stelter & Brinck tundish preheater is used to preheat tundishes.

Z006 (Tundish Preheater 2)
The No. 2 Stelter & Brinck tundish preheater is used to preheat tundishes.

Z015 (Hot Strip Mill)
The Hot Strip Mill is a hot rolling of steel slabs operation.

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:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Rd
Cincinnati, OH 45219-2660
(513) 946-7777

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

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

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

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

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

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

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

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

iii. **For monitoring, record keeping, and reporting requirements:**
Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record

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

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

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

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

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

4. Title IV Provisions

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

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition

depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

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

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

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.
(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:
(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

15. Emergencies

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

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

16. Off-Permit Changes

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

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

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

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

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

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

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

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

17. Compliance Method Requirements

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

18. Insignificant Activities

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

19. Permit to Install Requirement

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

20. Air Pollution Nuisance

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

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

6. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> 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 will be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for National Emission Standards for Hazardous Air Pollutants (NESHAP) for 40 CFR Part 63, Subpart DDDDD, Industrial/Commercial/Institutional Boilers and Process Heaters. 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 MACT standard is not promulgated by May 15, 2004, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted no later than May 15, 2004 [this date may be changed to May 15, 2003 as a result of a settlement between U.S. EPA and the Sierra Club], and must contain the following information:

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

3. If the NESHAP is promulgated before May 15, 2004, the facility shall be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

a. Within 120 days after promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP) for 40 CFR Part 63, Subpart DDDDD, Industrial / Commercial / Institutional Boilers and Process Heaters, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report, 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, including the operating design capacity and an identification of each emission point of each HAP; and

v a statement confirming the facility is a major source for HAPs.

A. State and Federally Enforcable Section (continued)

Within 60 days following completion of any required compliance demonstration activity specified in National Emission Standards for Hazardous Air Pollutants (NESHAP) for 40 CFR Part 63, Subpart DDDDD, Industrial/Commercial/Institutional Boilers and Process Heaters, 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 40 CFR Part 63, Subpart DDDDD, Industrial/Commercial/Institutional Boilers and Process Heaters;

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 40 CFR Part 63, Subpart DDDDD, Industrial/Commercial/Institutional Boilers and Process Heaters.

4. The permittee shall comply with the applicable requirements of 40 CFR Part 63 Subpart FFFF-National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities as specified in Attachment B of this permit.

5. The permittee shall comply with the applicable requirements of 40 CFR Part 63 Subpart CCCCC--National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks as specified in Attachment B of this permit.

B. State Only Enforceable Section

1. The following insignificant emissions unit(s)are located at this facility:

P090 Shops Abrasive Blast
T011 STTP HCl Tanks
Z012 NiCO3 Storage Tank
Z013 NiCO3/Elect Mixer
Z014 Lime Silo
Z016 Roll./RP Oils Tanks
Z019 EGL WWTP Lime Bins
Z020 STTP Limestone Bins
Z021 HSM WWTP RM A Bins
Z022 HSM WWTP RM B Bins
Z023 HSM WWTP RM C Bins
Z024 NTTP Lime Bins
Z025 Chem B Lime Bins
Z026 CHEM B FS Bins
Z027 No. 8 Fuel Oil Tank
Z028 No. 5 Fuel Oil Tank
Z029 CSM Waste Oil Tanks
Z030 4CL CA Strip Spray
Z031 4CL Pot Snout Heating
Z032 4CL Pot Preheater
Z033 4CL Printer
Z034 3CL Caustic Rec Tank
Z035 3CL Bonderite
Z036 3CL Rust Prev Tank 1
Z037 3CL Rust Prev Tank 2
Z038 3CL H2SO4 Cleaning
Z039 TCL NiSO4 Feed Tank
Z040 TCL HCl Holding Tank
Z041 TCL Caustic Tank EG
Z042 TCL Outside HCl Tank
Z043 TCL Electrolytic Tanks
Z044 2EG Caustic Tank
Z045 2EG Degreas. Tank
Z046 2EG Surf Act. Tank
Z047 2EG Rust Prev Tank
Z048 2EG Con Roll Zn Tank
Z049 2EG Con Roll ZnNi Tank
Z050 2EG Tank Farm

B. State Only Enforceable Section (continued)

Z051	2EG Permerate Tank
Z052	2EG W H2SO4 Tank
Z053	2EG E H2SO4 Tank
Z054	Diesel Tank - Garage
Z055	PS MT25 Tank - 6TM
Z056	PS 1 Roll Shop Cool. Tank
Z057	N4P ULHF46 Tank
Z058	N5P ULHF46 Tank
Z059	N4P Pickle Rinse Tanks
Z060	N5P Pickle Rinse Tanks
Z061	N4P SPL Tanks
Z062	N5P SPL Tanks
Z063	Rolling Oil Tank- Pickle Hse
Z064	Rust Prev Tank - Pickle Hse
Z065	N4P ULMP2 Tank
Z066	N5P ULMP2 Tank
Z067	CSM N3 Sys Lube Oil Tank
Z068	CSM UNOCAL Hyd Tank
Z069	CSM ULMR2 RP Tank
Z070	CSM Unimist 222 Tank
Z071	CSM Morgoil MO1 Tank
Z072	CSM Morgoil MO2 Tank
Z073	CSM DI Water Tank
Z074	CSM Morgoil 1200 Tank1
Z075	CSM Morgoil 1200 Tank2
Z076	CSM Morgoil 2450 Tank1
Z077	CSM Morgoil 2450 Tank2
Z078	CSM N6 Hyd Sys Tank
Z079	CSM N8 Hyd Sys Tank
Z080	CSM Roll Coolant Tanks
Z081	HSM Hyd 22,23,24 Tank
Z082	HSM Hot Rolling Oil Tank
Z083	HSM H-17 Sys Tank
Z084	HSM H-18 Sys Tank
Z085	HSM H-1 Sys Tank
Z086	HSM H-2 Sys Tank
Z087	HSM H-1, H-2 Sys Tank
Z088	HSM ULSO385 604 Tank
Z089	HSM ULSO385 613 Tank
Z090	HSM Bulk Tanks - Door 611
Z091	HSM Scale Pits (3)
Z092	HSM RS ULSY995 System
Z093	HSM RS ULSY997 System
Z094	N3BF Stockhse Hyd Tank
Z095	N3BF N5 Cooling Tower Cell
Z096	N3BF N Sludge Pond
Z097	N3BF S Sludge Pond
Z098	N2BH Nitric Acid Tank
Z099	N2BH Betz CPD Tank
Z100	N2BH Betz AL39 Tank1

B. State Only Enforceable Section (continued)

Z101 N2BH Lime Slurry Tanks
Z102 N2BH Betz AL39 Tank2
Z103 EGLTP Caustic Tank1
Z104 EGLTP Caustic Tank2
Z105 EGLTP Zn/Ni Surge Tanks
Z106 EGLTP Zn/Ni Mix Tank
Z107 EGLTP Zn/Ni Used Oil Tank
Z108 EGLTP Nalco 9901 Tanks
Z109 STTP PRW Tanks (2)
Z110 STTP Ashland SPL Tank
Z111 STTP Crown Inhib. Tank
Z112 STTP Oil Skim A/A Tank
Z113 STTP Interm Inhib Tank
Z114 HSMTP Betz 91946 Tank
Z115 HSMTP H2SO4 Tank
Z116 HSM Oil Holding Tanks (2)
Z117 NTTP SPL Tank
Z118 NTTP PRW Surge Tanks (3)
Z119 NTTP Caustic Tank
Z120 NTTP Oil Concentator Pit
Z121 N3BH Nalco 1720 Tank
Z122 N3BH Nalco 7204T Tank
Z123 N3BH N6 Fuel Oil Tank
Z124 N3BH N7 Fuel Oil Tank
Z125 Carp Saws(3) Exhaust
Z126 Weld Weld N Lathe
Z127 Weld Weld M Lathe
Z128 Weld Weld S Lathe
Z129 Weld Roll Preheater
Z130 Mach Cut-Off Saw
Z131 Mach Caster Roll Grind.
Z132 Lub Pipe Clean Tank
Z133 Lub Grease Tank 607
Z134 Lub Grease Tanks 612
Z135 Dust Suppr Tank Door 82A
Z136 Dust Suppr Tank Door 600K
Z137 Round House Diesel Tank 1
Z138 Round House Diesel Tank 2
Z139 Diesel Tank Door 351
Z140 Round Hse Waste Oil Tank
Z141 CP H2SO4 S Tanks
Z142 CP H3PO4 N Tank
Z143 CP H3PO4 S Tank
Z144 CP Caustic E Tank
Z145 CP Caustic W Tank
Z146 CP Bulk Oil S Tank
Z147 Deskull Pit
Z148 BOF NALCO 8315 T
Z149 BOF Quin 822-300 T
Z150 BOF Betz 36073 T

Z151 Misc Kerosene Tanks
Z152 Misc Cold Cleaners
Z154 3CL Printer
Z155 EGL Printer
Z156 Round Hse Lub Tank

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: Boiler No.1,No.2 BH (B007)

Activity Description: Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	See A.I.2.a and A.I.2.c below.
	OAC rule 3745-17-10(C)(1)	See A.I.2.b below.
	OAC rule 3745-18-15(C)(1)	Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

2. Additional Terms and Conditions

2.a Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil, or used oil with any gaseous fuel, or blast furnace gas.

2.b Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher),used oil, or when co-firing non-distillate oil or used oil with any gaseous fuels. This limit was obtained from curve P-1 in Figure I of OAC rule 3745-17-10 using a total heat input of 844 mmBtu/hr, which is the combined total heat input from emissions units B007 thru B010.

2.c Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of oil.

II. Operational Restrictions (continued)

2. The quality of the coke oven gas, blast furnace gas, and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven and blast furnace gas collected during each calendar month.

3. The permittee shall burn only natural gas, fuel oil, used oil, blast furnace gas, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,),or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu).(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

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

2. The permittee shall collect representative samples of the coke oven gas and the blast furnace gas burned in this emission unit. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas, natural gas, and blast furnace gas burned;

b. the average sulfur content of the samples taken, recorded in percent by weight, of the coke oven gas and blast furnace gas (the grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas and blast furnace gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S times 0.94 pound of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas and blast furnace gas (0.036 pounds per cubic feet);

c. the average heat content of the samples taken for blast furnace gas and coke oven gas (the heat content shall be determined by use of a continuous calorimeter and shall be expressed in Btu per cubic foot); and

d. the average sulfur dioxide emission rate for the coke oven gas and blast furnace gas, recorded as pounds of SO2/mmBtu actual heat input (the resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate).

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

The hydrogen sulfide content, heat content, and sampling procedures for the coke oven gas and blast furnace gas shall be based on approved ASTM Procedures.

3. 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.

4. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.1. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

2. 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.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and/or coke oven gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil or used oil with any gaseous fuel, or blast furnace gas.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) The actual particulate emission rate when distillate oil (No 2 fuel oil or lighter) is being fired may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, or non-distillate oil or used oil with any gaseous fuels.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.d Emission Limitation:

Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) To determine the particulate emission rate for blast furnace gas, the permittee may use the emission factor of 0.015 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning coke oven gas or blast furnace gas.

(iii) If required, the permittee shall demonstrate compliance with this emission limitation, while burning No. fuel oil mixed with used oil, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

V. Testing Requirements (continued)

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 this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate matter when firing No. 6 fuel oil mixed with used oil. The concentration of used oil with No. 6 fuel oil shall be representative of normal operating conditions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

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 Hamilton County Department of Environmental Services.

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

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Prior to combusting used oil this emissions unit, the permittee shall perform the reporting requirements in section B.IV.1 of this permit.

2. All recycled, used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property	Allowable Specification
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	15 ppm, maximum
lead	100 ppm, maximum
PCBs	10 ppm, maximum*
total halogens	6000 ppm, maximum**
mercury	1 ppm, maximum
flash point	100 degrees F, minimum
heat content	120,000 Btu/gallon, minimum

* If the permittee is burning used oil with any quantifiable level (i.e., 2 ppm) of PCBs, then the permittee is subject to the notification requirements of 40 CFR 279.62.

** Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR, Part 266.40(c) and OAC Chapter 3745-279. Therefore, the permittee may burn used oil exceeding 1000 ppm of total halogens (but less than 6000 ppm, maximum) only if the permittee has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall receive a chemical analysis with each shipment of used oil received and shall maintain records of all such analyses. Each analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:

a. quantity of used oil received;
b. the Btu value of the used oil;
c. the flash point of the used oil;
d. the arsenic content;
e. the cadmium content;
f. the chromium content;
g. the lead content;
h. the PCB content;
i. the total halogen content; and
j. the mercury content.

IV. Reporting Requirements

1. The permittee shall notify USEPA and Ohio EPA if any of the used oil exceeds the used oil specifications found in section B.II.2 and OAC rule 3745-279-11. If the permittee is burning used oil that exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule.

V. Testing Requirements

1. Compliance with the used oil specifications shall be determined by the record keeping requirements in section B.III of these terms and conditions.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler No.4,No.2 BH (B008)

Activity Description: Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	See A.I.2.a and A.I.2.c below.
	OAC rule 3745-17-10(C)(1)	See A.I.2.b below.
	OAC rule 3745-18-15(C)(1)	Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

2. Additional Terms and Conditions

2.a Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil, or used oil with any gaseous fuel, or blast furnace gas.

2.b Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher),used oil, or when co-firing non-distillate oil or used oil with any gaseous fuels. This limit was obtained from curve P-1 in Figure I of OAC rule 3745-17-10 using a total heat input of 844 mmBtu/hr, which is the combined total heat input from emissions units B007 thru B010.

2.c Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of oil.

II. Operational Restrictions (continued)

2. The quality of the coke oven gas, blast furnace gas, and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven and blast furnace gas collected during each calendar month.

3. The permittee shall burn only natural gas, fuel oil, used oil, blast furnace gas, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,),or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu).(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

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

2. The permittee shall collect representative samples of the coke oven gas and the blast furnace gas burned in this emission unit. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas, natural gas, and blast furnace gas burned;

b. the average sulfur content of the samples taken, recorded in percent by weight, of the coke oven gas and blast furnace gas (the grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas and blast furnace gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S times 0.94 pound of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas and blast furnace gas (0.036 pounds per cubic feet);

c. the average heat content of the samples taken for blast furnace gas and coke oven gas (the heat content shall be determined by use of a continuous calorimeter and shall be expressed in Btu per cubic foot); and

d. the average sulfur dioxide emission rate for the coke oven gas and blast furnace gas, recorded as pounds of SO2/mmBtu actual heat input (the resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate).

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

The hydrogen sulfide content, heat content, and sampling procedures for the coke oven gas and blast furnace gas shall be based on approved ASTM Procedures.

3. 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.

4. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.1. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

2. 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.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and/or coke oven gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil or used oil with any gaseous fuel, or blast furnace gas.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) The actual particulate emission rate when distillate oil (No 2 fuel oil or lighter) is being fired may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, or non-distillate oil or used oil with any gaseous fuels.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.d Emission Limitation:

Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) To determine the particulate emission rate for blast furnace gas, the permittee may use the emission factor of 0.015 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning coke oven gas or blast furnace gas.

(iii) If required, the permittee shall demonstrate compliance with this emission limitation, while burning No. fuel oil mixed with used oil, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

V. Testing Requirements (continued)

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 this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate matter when firing No. 6 fuel oil mixed with used oil. The concentration of used oil with No. 6 fuel oil shall be representative of normal operating conditions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

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 Hamilton County Department of Environmental Services.

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

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Prior to combusting used oil this emissions unit, the permittee shall perform the reporting requirements in section B.IV.1 of this permit.

2. All recycled, used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property	Allowable Specification
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	15 ppm, maximum
lead	100 ppm, maximum
PCBs	10 ppm, maximum*
total halogens	6000 ppm, maximum**
mercury	1 ppm, maximum
flash point	100 degrees F, minimum
heat content	120,000 Btu/gallon, minimum

* If the permittee is burning used oil with any quantifiable level (i.e., 2 ppm) of PCBs, then the permittee is subject to the notification requirements of 40 CFR 279.62.

** Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR, Part 266.40(c) and OAC Chapter 3745-279. Therefore, the permittee may burn used oil exceeding 1000 ppm of total halogens (but less than 6000 ppm, maximum) only if the permittee has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall receive a chemical analysis with each shipment of used oil received and shall maintain records of all such analyses. Each analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:

a. quantity of used oil received;
b. the Btu value of the used oil;
c. the flash point of the used oil;
d. the arsenic content;
e. the cadmium content;
f. the chromium content;
g. the lead content;
h. the PCB content;
i. the total halogen content; and
j. the mercury content.

IV. Reporting Requirements

1. The permittee shall notify USEPA and Ohio EPA if any of the used oil exceeds the used oil specifications found in section B.II.2 and OAC rule 3745-279-11. If the permittee is burning used oil that exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule.

V. Testing Requirements

1. Compliance with the used oil specifications shall be determined by the record keeping requirements in section B.III of these terms and conditions.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler No.3,No.2 BH (B009)

Activity Description: Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	See A.I.2.a and A.I.2.c below.
	OAC rule 3745-17-10(C)(1)	See A.I.2.b below.
	OAC rule 3745-18-15(C)(1)	Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

2. Additional Terms and Conditions

2.a Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil, or used oil with any gaseous fuel, or blast furnace gas.

2.b Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher),used oil, or when co-firing non-distillate oil or used oil with any gaseous fuels. This limit was obtained from curve P-1 in Figure I of OAC rule 3745-17-10 using a total heat input of 844 mmBtu/hr, which is the combined total heat input from emissions units B007 thru B010.

2.c Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of oil.

II. Operational Restrictions (continued)

2. The quality of the coke oven gas, blast furnace gas, and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven and blast furnace gas collected during each calendar month.

3. The permittee shall burn only natural gas, fuel oil, used oil, blast furnace gas, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,),or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu).(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

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

2. The permittee shall collect representative samples of the coke oven gas and the blast furnace gas burned in this emission unit. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas, natural gas, and blast furnace gas burned;

b. the average sulfur content of the samples taken, recorded in percent by weight, of the coke oven gas and blast furnace gas (the grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas and blast furnace gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S times 0.94 pound of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas and blast furnace gas (0.036 pounds per cubic feet);

c. the average heat content of the samples taken for blast furnace gas and coke oven gas (the heat content shall be determined by use of a continuous calorimeter and shall be expressed in Btu per cubic foot); and

d. the average sulfur dioxide emission rate for the coke oven gas and blast furnace gas, recorded as pounds of SO2/mmBtu actual heat input (the resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate).

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

The hydrogen sulfide content, heat content, and sampling procedures for the coke oven gas and blast furnace gas shall be based on approved ASTM Procedures.

3. 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.

4. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.1. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

2. 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.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and/or coke oven gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil or used oil with any gaseous fuel, or blast furnace gas.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) The actual particulate emission rate when distillate oil (No 2 fuel oil or lighter) is being fired may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, or non-distillate oil or used oil with any gaseous fuels.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.d Emission Limitation:

Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) To determine the particulate emission rate for blast furnace gas, the permittee may use the emission factor of 0.015 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning coke oven gas or blast furnace gas.

(iii) If required, the permittee shall demonstrate compliance with this emission limitation, while burning No. fuel oil mixed with used oil, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

V. Testing Requirements (continued)

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 this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate matter when firing No. 6 fuel oil mixed with used oil. The concentration of used oil with No. 6 fuel oil shall be representative of normal operating conditions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

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 Hamilton County Department of Environmental Services.

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

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Prior to combusting used oil this emissions unit, the permittee shall perform the reporting requirements in section B.IV.1 of this permit.

2. All recycled, used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property	Allowable Specification
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	15 ppm, maximum
lead	100 ppm, maximum
PCBs	10 ppm, maximum*
total halogens	6000 ppm, maximum**
mercury	1 ppm, maximum
flash point	100 degrees F, minimum
heat content	120,000 Btu/gallon, minimum

* If the permittee is burning used oil with any quantifiable level (i.e., 2 ppm) of PCBs, then the permittee is subject to the notification requirements of 40 CFR 279.62.

** Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR, Part 266.40(c) and OAC Chapter 3745-279. Therefore, the permittee may burn used oil exceeding 1000 ppm of total halogens (but less than 6000 ppm, maximum) only if the permittee has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall receive a chemical analysis with each shipment of used oil received and shall maintain records of all such analyses. Each analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:

a. quantity of used oil received;
b. the Btu value of the used oil;
c. the flash point of the used oil;
d. the arsenic content;
e. the cadmium content;
f. the chromium content;
g. the lead content;
h. the PCB content;
i. the total halogen content; and
j. the mercury content.

IV. Reporting Requirements

1. The permittee shall notify USEPA and Ohio EPA if any of the used oil exceeds the used oil specifications found in section B.II.2 and OAC rule 3745-279-11. If the permittee is burning used oil that exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule.

V. Testing Requirements

1. Compliance with the used oil specifications shall be determined by the record keeping requirements in section B.III of these terms and conditions.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler No.2,No.2 BH (B010)

Activity Description: Babcock & Wilcox Gas/Oil Industrial Boiler produces steam for consumption throughout the facility.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	See A.I.2.a and A.I.2.c below.
	OAC rule 3745-17-10(C)(1)	See A.I.2.b below.
	OAC rule 3745-18-15(C)(1)	Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

2. Additional Terms and Conditions

2.a Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil, or used oil with any gaseous fuel, or blast furnace gas.

2.b Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher),used oil, or when co-firing non-distillate oil or used oil with any gaseous fuels. This limit was obtained from curve P-1 in Figure I of OAC rule 3745-17-10 using a total heat input of 844 mmBtu/hr, which is the combined total heat input from emissions units B007 thru B010.

2.c Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of oil.

II. Operational Restrictions (continued)

2. The quality of the coke oven gas, blast furnace gas, and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.90 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven and blast furnace gas collected during each calendar month.

3. The permittee shall burn only natural gas, fuel oil, used oil, blast furnace gas, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,),or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu).(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

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

2. The permittee shall collect representative samples of the coke oven gas and the blast furnace gas burned in this emission unit. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas, natural gas, and blast furnace gas burned;

b. the average sulfur content of the samples taken, recorded in percent by weight, of the coke oven gas and blast furnace gas (the grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas and blast furnace gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S times 0.94 pounds of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas and blast furnace gas (0.036 pounds per cubic feet);

c. the average heat content of the samples taken for blast furnace gas and coke oven gas (the heat content shall be determined by use of a continuous calorimeter and shall be expressed in Btu per cubic foot); and

d. the average sulfur dioxide emission rate for the coke oven gas and blast furnace gas, recorded as pounds of SO2/mmBtu actual heat input (the resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate).

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

The hydrogen sulfide content, heat content, and sampling procedures for the coke oven gas and blast furnace gas shall be based on approved ASTM Procedures.

3. 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.

4. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

2. 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.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, blast furnace gas, and/or coke oven gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, non-distillate fuel oil or used oil with any gaseous fuel, or blast furnace gas.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) The actual particulate emission rate when distillate oil (No 2 fuel oil or lighter) is being fired may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

Particulate emissions shall not exceed 0.11 pound per million Btu of actual heat input when burning non-distillate fuel oil (No. 4 fuel oil or higher), used oil, or non-distillate oil or used oil with any gaseous fuels.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.d Emission Limitation:

Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning only blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

E (lb/mmBtu) = (1.9 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu) = 0.0019 lb/mmBtu

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10^6 scf = emission factor for filterable particulate matter from burning natural gas, from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) To determine the particulate emission rate for blast furnace gas, the permittee may use the emission factor of 0.015 lb particulate/mmBtu from AP-42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.90 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning coke oven gas or blast furnace gas.

(iii) If required, the permittee shall demonstrate compliance with this emission limitation, while burning No. fuel oil mixed with used oil, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

V. Testing Requirements (continued)

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 this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate matter when firing No. 6 fuel oil mixed with used oil. The concentration of used oil with No. 6 fuel oil shall be representative of normal operating conditions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

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 Hamilton County Department of Environmental Services.

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

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
211 MMBtu/hr coke oven gas, blast furnace gas, natural gas, used oil, and fuel oil fired boiler	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Prior to combusting used oil this emissions unit, the permittee shall perform the reporting requirements in section B.IV.1 of this permit.

2. All recycled, used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property	Allowable Specification
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	15 ppm, maximum
lead	100 ppm, maximum
PCBs	10 ppm, maximum*
total halogens	6000 ppm, maximum**
mercury	1 ppm, maximum
flash point	100 degrees F, minimum
heat content	120,000 Btu/gallon, minimum

* If the permittee is burning used oil with any quantifiable level (i.e., 2 ppm) of PCBs, then the permittee is subject to the notification requirements of 40 CFR 279.62.

** Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR, Part 266.40(c) and OAC Chapter 3745-279. Therefore, the permittee may burn used oil exceeding 1000 ppm of total halogens (but less than 6000 ppm, maximum) only if the permittee has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall receive a chemical analysis with each shipment of used oil received and shall maintain records of all such analyses. Each analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:

a. quantity of used oil received;
b. the Btu value of the used oil;
c. the flash point of the used oil;
d. the arsenic content;
e. the cadmium content;
f. the chromium content;
g. the lead content;
h. the PCB content;
i. the total halogen content; and
j. the mercury content.

IV. Reporting Requirements

1. The permittee shall notify USEPA and Ohio EPA if any of the used oil exceeds the used oil specifications found in section B.II.2 and OAC rule 3745-279-11. If the permittee is burning used oil that exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule.

V. Testing Requirements

1. Compliance with the used oil specifications shall be determined by the record keeping requirements in section B.III of these terms and conditions.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 84 Anneal (B021)

Activity Description: No. 84 Anneal is a batch annealing of cold rolled steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
118.6 mmBtu/hr, direct fired, natural gas furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(6)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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.

2. Monitoring and record keeping for the sulfur content is not required for natural gas because the sulfur dioxide emission rate from the burning of natural gas is always less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.

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:

Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO2 from natural gas, the following equation may be used:

E (lb/mmBtu) = (0.6 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu)

Where:

E = SO2 emission rate from natural gas, in lb/mmBtu;

0.6 lb/10^6 scf = emission factor for SO2 from burning natural gas from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Open Coil Anneal (B022)

Activity Description: Open Coil Anneal is a batch annealing of cold rolled steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
80 mmBtu/hr, direct fired, natural gas furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(6)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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.

2. Monitoring and record keeping for the sulfur content is not required for natural gas because the sulfur dioxide emission rate from the burning of natural gas is always less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.

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:

Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO2 from natural gas, the following equation may be used:

E (lb/mmBtu) = (0.6 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu)

Where:

E = SO2 emission rate from natural gas, in lb/mmBtu;

0.6 lb/10^6 scf = emission factor for SO2 from burning natural gas from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 64 Anneal (B023)

Activity Description: No. 64 Anneal is a batch annealing of cold rolled steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
244.2 mmBtu/hr, direct fired, natural gas furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(6)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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.

2. Monitoring and record keeping for the sulfur content is not required for natural gas because the sulfur dioxide emission rate from the burning of natural gas is always less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.

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:

Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO2 from natural gas, the following equation may be used:

E (lb/mmBtu) = (0.6 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu)

Where:

E = SO2 emission rate from natural gas, in lb/mmBtu;

0.6 lb/10^6 scf = emission factor for SO2 from burning natural gas from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 94 Anneal (B026)

Activity Description: No. 94 Anneal is a batch annealing of cold rolled steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
145.8 mmBtu/hr, direct fired, natural gas furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(6)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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.

2. Monitoring and record keeping for the sulfur content is not required for natural gas because the sulfur dioxide emission rate from the burning of natural gas is always less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.

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:

Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO2 from natural gas, the following equation may be used:

E (lb/mmBtu) = (0.6 lb/10^6 scf) x (1 scf/1000 Btu) x (1,000,000 Btu/mmBtu)

Where:

E = SO2 emission rate from natural gas, in lb/mmBtu;

0.6 lb/10^6 scf = emission factor for SO2 from burning natural gas from AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No.2 Coke Plant (B918)

Activity Description: Wilputte Underjet 76-oven Coke Battery produces coke and various coke by-products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
coke oven firing (combustion stack)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-10(C)(1)	Particulate emissions from coke oven firing (combustion stack) shall not exceed 0.18 pound per mmBtu of actual heat input.
	OAC rule 3745-18-15(C)(3)	See A.I.2.b below.
emergency bypass bleeder flare	40 CFR Part 63.307(c)	See A.I.2.c below.
charging operations	40 CFR Part 63.302(a)(1)(iv)	See A.I.2.d. below
	OAC rule 3745-17-07(B)(2)(a)	The visible particulate emission limitation established in OAC rule 3745-17-07(B)(2)(a) is less stringent than that established in 40 CFR Part 63.302(a)(1)(iv)
	OAC rule 3745-17-08(B)	The requirements of this rule are less stringent than those established in 40 CFR Part 63.302.
offtake systems	40 CFR Part 63.302(a)(1)(iii)	See A.I.2.e below.
	OAC rule 3745-17-07(B)(2)(b)	The visible particulate emission limitation established in OAC rule 3745-17-07(B)(2)(b) is less stringent than that established in 40 CFR Part 63.302(a)(1)(iii).
	OAC rule 3745-17-08(B)	The requirements of this rule are less stringent than those established in 40 CFR Part 63.302.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
topside port lids	40 CFR Part 63.302(a)(1)(ii)	See A.I.2.f below.
	OAC rule 3745-17-07(B)(2)(c)	The visible particulate emission limitation established in OAC rule 3745-17-07(B)(2)(c) is less stringent than that established in 40 CFR Part 63.302(a)(1)(ii).
	OAC rule 3745-17-08(B)	The requirements of this rule are less stringent than those established in 40 CFR Part 63.302.
oven doors	40 CFR Part 63.302(a)(1)(i)(B)	See A.I.2.g below.
	OAC rule 3745-17-07(B)(2)(d)	The visible particulate emission limitation established in OAC rule 3745-17-07(B)(2)(d) is less stringent than that established in 40 CFR Part 63.302(a)(1)(i)(B).
	OAC rule 3745-17-08(B)	The requirements of this rule are less stringent than those established in 40 CFR Part 63.302.
collecting main	40 CFR Part 63.308	See A.III.3 below.
pushing operations	OAC rule 3745-17-07(B)(2)(e)	Visible particulate emissions during any pushing operation shall not exceed an average of 20 percent opacity read above the battery top. The duration of a pushing operation shall commence with the moving from an oven and shall conclude when the quench cars enter the quench tower.
	OAC rule 3745-17-08(B)	Particulate emissions from the fabric filter exhaust shall not exceed 0.030 grains/dry standard cubic foot of exhaust gases or no visible emissions from the exhaust gases which ever is more stringent.

2. Additional Terms and Conditions

2.a Visible particulate emissions from the combustion stack shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.

2.b The hydrogen sulfide content of the coke oven gas combusted in this emissions unit shall not exceed 280 grains per 100 dry standard cubic feet of coke oven gas.

2.c The emergency bypass bleeder flare shall be operated with no visible emissions, as determined by the methods specified in 40 CFR Part 60, Appendix A, Method 22 with an observation period of two hours, except for periods not to exceed 5 minutes during any 2 consecutive hours.

2. Additional Terms and Conditions (continued)

2.d During charging operations, visible particulate emissions shall not exceed 12 seconds per charge, as determined by the procedures in section A.V.1.e of these terms and conditions.

2.e There shall be no visible particulate emissions from more than 3.0 percent of the offtake systems, as determined by the procedures in section A.V.1.f of these terms and conditions.

2.f There shall be no visible particulate emissions from more than 0.6 percent of the topside port lids, as determined by the procedures in section A.V.1.f of these terms and conditions.

2.g There shall be no visible particulate emissions from more than 5.5 percent of the oven doors, as determined by the procedures in section A.V.1.f of these terms and conditions. On and after January 1, 2003, there shall be no visible particulate emissions from more than 5.0 percent of the oven doors, as determined by the procedures in section A.V.1.f of these terms and conditions.

2.h An oven door and the associated chuck door on the pusher side of the battery shall be considered as one door. [OAC rule 3745-17-07(B)(2)(d)(iii)]

2.i At all times including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the coke oven battery, and its pollution control equipment, in a manner consistent with good air pollution practices for minimizing emissions to the level required in sections A.I.1 and A.I.2 of these terms and conditions.

II. Operational Restrictions

1. In accordance with the requirements of 40 CFR Part 63, Subpart L, the emergency bypass bleeder flare shall comply with the following requirements:

a. the flare shall be able to control 120% of the normal gas flow generated by the battery;

b. the flare shall be steam-assisted and shall have a net heating value of 240 Btu/scf;

c. the flare shall be operated with a continuously operable pilot flame monitored by a thermocouple (or equivalent device); and

d. coke oven emissions shall not be vented to the atmosphere through the bypass bleeder stack, except through the flare system.

2. The permittee shall operate according to the work practice plan, required by section A.III.5 for each emission point, following the second independent exceedance of the visible emission limitation for that emission point in any consecutive 6-month period, by no later than 3 days after the receipt of written notification of the second such exceedance from the certified observer. The permittee shall continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days.

3. The pressure drop across the fabric filter controlling the pushing operations shall be maintained within the range of 2.0 to 6.0 inches of water while this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the quantity of coke oven gas (million cubic feet) burned in this emissions unit.

2. The collecting main shall be inspected at least once daily in accordance with 40 CFR Part 63, Appendix A, Method 303.

The charging operations shall be inspected at least once daily, for 5 consecutive charges, in accordance with 40 CFR Part 63, Appendix A, Method 303.

The offtake piping, charging hole lids and oven doors shall be inspected at least once daily in accordance with 40 CFR Part 63, Appendix A, Method 303.

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

2.a 40 CFR Part 63, Appendix A, Method 303 visible emission readings shall be performed by a certified observer, and shall be conducted each day, 7 days per week, at various times during the day.

The certified observer shall complete any reasonable safety training program offered by the permittee prior to conducting any performance test at a coke oven battery.

2.b The permittee shall record the time and date each collecting main leak is first observed, the time and date the collecting main leak is temporarily sealed, and the time and date of repair. Any leak in the collecting main shall be temporarily sealed as soon as possible after detection, but no later than 4 hours after detection of the leak. The permittee shall initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak.

2.c The observer may perform additional visible emission runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under 40 CFR Part 63, Appendix A, Method 303. Observations from fewer than five consecutive charges shall constitute a valid set of charging operations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of 40 CFR Part 63, Appendix A, Method 303.

2.d If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.

2.e After each test for a by-product coke oven battery, the certified observer shall check and record the collecting main pressure according to the procedures in section 6.3 of 40 CFR Part 63, Appendix A, Method 303. The permittee shall demonstrate, pursuant to Method 303, the accuracy of the pressure measurement device upon request of the certified observer. The permittee shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection.

2.f The permittee shall not knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.

2.g Compliance with visible emission limitations shall be demonstrated using the observations obtained from each performance test in accordance with section A.V.1.f of these terms and conditions.

2.h The certified observer shall make available to the Hamilton County Department of Environmental Services, as well as to the permittee, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average of each emission point to the permittee as soon as practicable following each performance test. For the purpose of notifying the permittee of the results obtained by a certified observer, the person does not have to be certified.

2.i Compliance shall not be determined more often than the schedule provided for performance tests in these terms and conditions. If additional valid emissions observations are obtained (or in the case of charging , valid sets of emission observations), the arithmetic average of all values (or valid sets of values) obtained during the day shall be used in any computation performed to determine compliance under sections A.V.1.f or A.III.5 of these terms and conditions.

3. No observations obtained during any program for training or for certifying observers for 40 CFR Part 63, Appendix A, Method 303 shall be used to determine compliance with the requirements of these terms and conditions.

4. The permittee shall maintain a written emission control work practice plan for the coke battery. In accordance with the requirements of section 63.306 of 40 CFR Part 63, Subpart L, the plan shall be designed, implemented, and maintained to achieve compliance with the visible emission limitations for coke oven doors, charging hole lids, offtake systems and charging operations. The permittee shall organize the work practice plan so that the subjects required in accordance with sections A.III.5.a through A.III.5.e are clearly addressed.

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

4.a The work practice plan shall include procedures for initial and refresher training for all plant personnel and contractors with responsibilities that impact emissions. The training program shall include:

i. a list, by job title, of personnel that are required to be trained and the emission points associated with each job title;

ii. an outline of the subjects to be covered in the initial and refresher training for each group of personnel;

iii. a description of the training methods that will be used;

iv. a statement of the duration of initial training and the duration and frequency of refresher training;

v. a description of the methods used to demonstrate and document successful completion of the training program; and

vi. a description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form(s) to be completed by the certified Method 303 observer.

4.b The work practice plan shall include procedures for controlling emissions from oven doors including the following:

i. a program for the inspection, adjustment, repair, and replacement of coke oven door jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

ii. procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;

iii. procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;

iv. for batteries equipped with self sealing doors, procedures for the use of supplemental gasketing and luting materials, if the permittee elects to use such procedures as part of the program to prevent exceedances;

v. for batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary, to prevent exceedances;

vi. procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located on site; and

vii. procedures for monitoring and controlling collecting main back pressure, including corrective actions if pressure control problems occur.

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

4.c The work practice plan shall include procedures for controlling emissions from charging operations including the following:

i. procedures for equipment inspection, including the frequency of inspections, and the replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

ii. procedures for ensuring that the larry car hoppers are filled properly with coal;

iii. procedures for the alignment of the larry car over the oven to be charged;

iv. procedures for filling the oven;

v. procedures for ensuring that the coal is leveled properly in the oven; and

vi. procedures and schedules for inspection and cleaning of offtake systems, oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.

4.d The work practice plan shall include procedures for controlling emissions from topside port lids including the following:

i. procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and

ii. procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.

4.e The work practice plan shall include procedures for controlling emissions from oven offtake systems including the following:

i. procedures for equipment inspection and replacement or repair of offtake system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

ii. procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected; and

iii. procedures for dampering off ovens prior to a push.

4.f The work practice plan shall include procedures for maintaining, for each emission point subject to visible emission limitations by this permit, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:

i. procedures for recording the performance of such plan requirements; and

ii. procedures for certifying the accuracy of such records by the permittee.

4.g The permittee shall implement the work practice plan procedures after 2 independent exceedances of the visible emission limitations for an emission point within a 6-month period and within 3 days after the receipt of written notification.

The permittee shall continue the procedures of the work practice plan until the visible emission limitation for the point is achieved for 90 consecutive days.

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

4.h The permittee shall review and revise the work practice plan in accordance with the following:

i. The permittee may be required to review and revise the work practice plan for an emission point if there are 2 independent exceedances of a visible emission limitation within the 6-month period which begins 30 days after the permittee is required to implement the work practice plan.

ii. The permittee shall not be required to review and revise the work practice plan more than twice in any 12-month period for a particular emission point.

iii. If the certified observer calculates a second independent exceedance of the visible emission limitation has occurred for an emission point, the observer shall notify the permittee. Within 10 days of notification, the permittee shall notify the Administrator and the Director whether the work practices are related to the cause or solution of the problem.

iv. The permittee shall submit revised work practice plans within 60 days of notification from the Administrator or Director.

v. If a work practice plan revision is required, the permittee may be required to address subjects not listed in these terms and conditions or 40 CFR Part 63.306(b) if there is reason to expect further exceedances of the visible emission limitations.

vi. A work practice plan revision may be disapproved if the revised plan is not adequate to prevent future exceedances of the visible emission limitations.

4.i If the permittee is required to implement the provisions of the work practice plan for a particular emission point, the permittee shall maintain the following records regarding the implementation of plan requirements for that emission point during the implementation period:

i. copies of all written and audiovisual materials used in the training, the dates of each class, the names of the participants in each class, and documentation that all appropriate personnel have successfully completed the training required under section A.III.5.a of these terms and conditions;

ii. the records required to be maintained by the plan provisions implementing section A.III.5.f. of these terms and conditions;

iii. records resulting from audits of the effectiveness of the work practice program for the particular emission point, as required under sections A.III.5.b.i, A.III.5.c.i, A.III.5.d.i, and A.III.5.e.i of these terms and conditions; and

iv. if the plan provisions for coke oven doors must be implemented, records of the inventory of doors and jambs as required under section A.III.5.b.vi of these terms and conditions.

5. The permittee shall develop and implement, in accordance with the procedures in section 63.310 of 40 CFR Part 63, Subpart L, a written startup, shutdown, and malfunction plan for the coke oven battery. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the coke oven battery, and its pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by 40 CFR Part 63, Subpart L.

a. The permittee shall operate the coke oven battery in accordance with the startup, shutdown, and malfunction plan during a startup, shutdown, or malfunction event.

b. Malfunctions shall be corrected as soon as practical in accordance with this plan.

c. The permittee shall notify the certified Method 303 observer if practical and if the observer is at the facility during a malfunction event.

d. The permittee shall maintain plant records which form the basis of each malfunction notification.

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

e. The permittee may use the standard operating procedures manual for the coke oven battery to satisfy the requirements of a startup, shutdown, and malfunction plan if the standard operating procedure manual meets the requirements of these terms and conditions and 40 CFR Part 63.310 and is available for review at reasonable times.

f. The permittee may be required to make revisions to a startup, shutdown, and malfunction plan if the plan does not address (i) a startup, shutdown, malfunction event that has occurred; (ii) fails to provide adequate procedures for startup, shutdown, malfunctions which are consistent with good air pollution control practices; or (iii) does not provide adequate procedures to correct malfunctioning process equipment as soon as practical.

g. If the permittee demonstrates a startup, shutdown, or malfunction event has occurred, then an observation occurring during such event (i) shall not be a violation of relevant requirements, (ii) shall not be used in any visible emission compliance determination per Method 303, and (iii) shall not be considered as an exceedance for purposes of the work practice plan.

6. The permittee shall maintain records of the design drawings and engineering specifications for the emergency bypass bleeder flare.

For the emergency bypass bleeder flare, the permittee shall properly operate and maintain a device to continuously monitor the flare pilot flame. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

a. all periods during which there was no pilot flame; and

b. the downtime for the flare, monitoring equipment, and the associated emissions unit.

The permittee shall observe and record emergency bleeder flare visible emissions each time the bleeder flare is employed and when the emissions unit is operating and when weather conditions allow in accordance with the methods and procedures of 40 CFR Part 60, Appendix A, Method 22 with an observation period of 2 hours.

7. The permittee shall, on a weekly basis, observe and record combustion stack visible emissions in accordance with the methods and procedures of 40 CFR Part 60, Appendix A, Method 9.

8. The permittee shall maintain files of all required information in a permanent form suitable for inspection at an on site location for at least 1 year and must thereafter be assessable within 3 working days to the Administrator and/or Director for a period of at least 5 years from the date of the monitoring, sample, measurement, report, or application.

9. The permittee shall verify the presence of a pilot flame on the emergency bypass bleeder flare at a minimum of once per shift. The permittee shall maintain records of the presence of a pilot flame on the emergency bypass bleeder flare at a minimum of once per shift.

10. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the fabric filter while this emission unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The permittee shall record the pressure drop across the fabric filter on a once per shift basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports identifying all periods of time during which the coke oven battery exceeded the visible emission limitations for charging, offtake piping, oven lids, and oven doors.

IV. Reporting Requirements (continued)

2. The permittee shall submit semi-annual reports which provide the following information for each period during that the emergency bypass bleeder flare is operated:

a. the date the flare was operated;

b. the time interval over which the flare operated;

c. the malfunction(s) which necessitated the operation of the flare;

d. the corrective action which has been or will be taken to prevent similar malfunction(s) in the future; and

e. if the flare was not operated during the previous 6-month period, a statement to that effect.

These semi-annual certifications shall be submitted to the U. S. EPA Region 5 Administrator, with a copy to the Hamilton County Department of Environmental Services.

3. The permittee shall submit quarterly deviation (excursion) reports identifying each instance when the results of the Method 9 readings documented an exceedance of the combustion stack visible emission limitation.

4. For the emergency bypass bleeder flare, the permittee shall submit quarterly deviation (excursion) reports identifying each instance when the results of the Method 22 readings documented an exceedance of the emergency flare visible emission limitation.

For the emergency bypass bleeder flare, the permittee shall submit quarterly deviation (excursion) reports identifying each instance when the thermocouple reading indicated the absence of a pilot flame.

5. Any malfunction which necessitates the use of the emergency bypass bleeder flare shall be reported to the Hamilton County Department of Environmental Services in accordance with the requirements of OAC rule 3745-15-06.

6. The permittee shall report the venting of coke oven gas through a bypass bleeder stack, that is not vented through the emergency bypass bleeder flare system, as soon as practical but no later than 24 hours after the beginning of the event.

A written report which includes a description of the event shall be submitted within 30 days after occurrence.

These reports shall be submitted to the U. S. EPA Region 5 Administrator, with a copy to the Hamilton County Department of Environmental Services.

7. The permittee shall submit semi-annual reports which provide the following information for each period during which the emergency bypass bleeder flare was operated:

a. the date the flare was operated;

b. the time interval over which the flare operated;

c. the malfunction(s) which necessitated the operation of the flare;

d. the corrective action which has been or will be taken to prevent similar malfunction(s) in the future; and

e. if the flare was not operated during the previous 6-month period, a statement to that effect.

These semi-annual certifications shall be submitted to the U. S. EPA Region 5 Administrator, with a copy to the Hamilton County Department of Environmental Services.

IV. Reporting Requirements (continued)

8. The permittee shall notify the Hamilton County Department of Environmental Services within 24 hours of a malfunction in accordance with the startup, shutdown, and malfunction plan and this notification shall include an explanation if the certified Method 303 observer was not notified as required in section A.III.6.c of this permit.

Within 14 days of the notification required above, the permittee shall submit a written report to the permitting authority describing the date, time, and circumstances of the startup, shutdown, or malfunction event and describing actions taken that may be inconsistent with the startup, shutdown, and malfunction plan.

9. The permittee shall submit semi-annual compliance certifications in accordance with the requirements of 40 CFR Part 63.311, which are signed by the permittee, certifying the following:

a. no coke oven gas was vented, except through the bypass/bleeder stack flare system, during the reporting period or that a venting report has been submitted in accordance with section A.IV.7 of this permit;

b. a startup, shutdown, or malfunction event did not occur during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted in accordance with section A.IV.9 of this permit; and

c. that work practices were implemented, as applicable, under the work practice plan required in section A.III.5 of this permit.

These semi-annual certifications shall be submitted to the U. S. EPA Region 5 Administator, with a copy to the Hamilton County Department of Environmental Services.

10. Within 45 days of the compliance date listed in section A.I.2.g of these terms and conditions, the permittee shall submit a written statement to the U. S. EPA Region 5 Administrator, with a copy to the Hamilton County Department of Environmental Services, signed by the permittee, certifying compliance with the emission limitation required by section A.I.2.g.

11. The permittee shall submit quarterly deviation (excursion) reports identifying any periods of time when a pilot flame was not present on the emergency bleeder flare and describing any corrective actions taken to relight and maintain a pilot flame.

12. The permittee shall submit quarterly deviation (excursion) reports that include an identification of all COG samples, and the corresponding periods of time, for which the hydrogen sulfide content exceeded 280 grains per 100 dry standard cubic feet of coke oven gas, and the actual hydrogen sulfide content for each such period.

13. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the fabric filter controlling the pushing operation did not comply with the allowable range specified in A.II.2.

14. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

V. Testing Requirements

1. Compliance with the emissions limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from the combustion stack shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions from coke oven firing (combustion stack) shall not exceed 0.18 pound per mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

The hydrogen sulfide content of the coke oven gas combusted in this emissions unit shall not exceed 280 grains per 100 dry standard cubic feet of coke oven gas.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements in section A.III.1 and the reporting requirements in section A.IV.2.

If required, compliance shall also be demonstrated based on the requirements specified in 40 CFR Part 60, Appendix A, Method 15.

1.d Emission Limitation:

The emergency bypass bleeder flare shall be operated with no visible emissions except for periods not to exceed 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 22 and the methods and procedures specified in OAC rule 3745-17-03(B)(4) with an observation period of 2 hours.

1.e Emission Limitations:

During charging operations, visible particulate emissions shall not exceed 12 seconds per charge.

Applicable Compliance Method:

Using the observations obtained in accordance with section A.III.3 of these terms and conditions, compliance shall be demonstrated by calculating the logarithmic 30-day, rolling average of the seconds of visible emissions per charge using the equation in section 3.9 of 40 CFR Part 63, Appendix A, Method 303.

1.f Emission Limitations:

There shall be no visible particulate emissions from more than 3.0 percent of the offtake systems.
There shall be no visible particulate emissions from more than 0.6 percent of the topside port lids.
There shall be no visible particulate emissions from more than 5.5 percent of the oven doors. On and after January 1, 2003, there shall be no visible particulate emissions from more than 5.0 percent of the oven doors.

Applicable Compliance Method:

Using the observations obtained in accordance with section A.III.3 of these terms and conditions, compliance shall be demonstrated by calculating the 30-run, rolling average of the percent leaking coke oven doors, topside port lids, and offtake systems using the equation in sections 4.5.3.2, 5.6.5.2, and 5.6.6.2 of 40 CFR Part 63, Appendix A, Method 303.

V. Testing Requirements (continued)

1.g The permittee shall conduct, or have conducted emissions testing for this emissions unit in accordance to the following requirements:

a. the stack testing shall be conducted within 6 months of the effective date of this permit Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing;

b. the testing shall be conducted at the outlet of the combustion stack to demonstrate compliance with the allowable mass emission limitation of 0.18 lb PE/mmBTU of actual heat input; and

c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

1.h The permittee shall conduct, or have conducted emissions testing for this emissions unit in accordance to the following requirements:

a. the stack testing shall be conducted within 6 months of the effective date of this permit Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing;

b. the testing shall be conducted at the outlet of the baghouse controlling the particulate emissions from the pushing operation to demonstrate compliance with the allowable mass emission limitation of 0.030 grain per dry standard cubic foot; and

c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

1. The permittee shall maintain one spare fan wheel, one set of motor bearings, and one set of bags for the pushing operations.

The permittee shall also maintain one spare coke receiving car.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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: Roads & Park. Areas (F001)

Activity Description: This includes unpaved roads, paved roads, and parking lots which are treated for dust suppression.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. Additional Terms and Conditions

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

paved roadways:*	Approx. one-way mileage of road segment
Processing Loop (4-5-6-7-8-9-)	1.90
South Stores Receiving (1-2-3-4)	0.35
Scale Pit (4-9-10)	0.75
General Services ((2-11-12)	0.75
Soaking Pit (10-11)	0.30
OSR Gate (11-27-28)	0.55
Coke Plant Loop (28-29-30-31)	1.10
BOF/Coal Pile (20-24-26-27)	0.65
Transportation (25-26)	0.30
Mold Yard (12-13-14)	0.70

2. Additional Terms and Conditions (continued)

paved parking areas:*	Approx. one-way mileage of road segment
Reeds Yard (14-15-16)	0.60
OH Loop (15-19-22-23)	0.55
BOF Loop (14-20-21)	0.55
Slag Hauler (BOF-24-28-Dump)	1.40
Slag Dump	1.60
Old Lefferson (16-17-18)	0.40
Lefferson/Yankee Gate (18-36)	0.50
E-W Freeway (32-33-34-35-36)	0.60
Old Muzzy (17-33)	0.20
Old Stores (33-34)	0.30
BF/BOF (11-19-20)	0.60
No. 1 OH (35-37)	0.30
East Processing (16-32-38)	1.00
West Processing (37-38)	0.25
North Perimeter (1-16)	0.85
Shipping Turn Around (32-32)	0.20
EGL Shipping (33-39)	0.25

* The number in parentheses after each name refers to AK Steel's road cleaning program checkpoints (see drawing 585163 as submitted by the permittee with their PTO application on 8/10/94).

paved parking areas:*	Approx. one-way mileage of road segment
Wicoff Gate	0.25
Administration/Staff	0.55
Lefferson Gate/Shops	0.30
Coke Plant	0.20
Contractor	0.30
Yankee Gate	0.20
Misc. South Area	1.00
Misc. North Area	0.55
Misc. Steel Area	1.00
HSM/CSM	0.60
Maintenance/Administration	0.65
Maingate	0.45

The paved roadway segments and parking lots listed above are shown schematically in Dwg. 585163 as submitted by the permittee with their PTO application on 8/10/94.

2. Additional Terms and Conditions (continued)

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

unpaved roadways:*	Approx. one-way mileage of road segment
(1-2)	0.2
(3-4)	0.3
(4-5)	0.5
(5-6)	0.2
(5-7)	0.6
(8-9)	0.5
(9-10)	0.3
(11-12)	0.6
(12-13)	0.2
(14-15)	0.3
(16-17)	0.2
(18-19)	0.2
(22-23)	1.0
(24-25)	0.2
(26-27)	0.2
(28-29)	0.3
(30-31)	0.2
(32-32)	0.3
(36-37)	0.2
(38-39)	0.2

* The unpaved roadway segments and parking lots listed above are shown schematically in Dwg. 585163 as submitted by the permittee with their PTO application on 8/10/94.

unpaved parking areas:

None

2.c The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by the following and shall be at sufficient treatment frequencies to ensure compliance:

i. All paved road segments and parking areas listed above shall periodically be swept or flushed of surface material in order to minimize or eliminate, at all times visible emissions of fugitive dust by vehicular traffic. The following or similar equipment shall be used for this purpose:

* Two Central Engineering Co., Model E10A Vac-All street sweepers, 13 cubic yard capacity, GM 4-53, Detroit Diesel 123 HP@ 2500 rpm, with a 350 gallon capacity water tank, 120 gpm high pressure pump, 15 feet of 3/4 inch hose and nozzle mounted on a Ford Model CO800 truck chassis, 39,000 lbs. GVW, 210 Hp. Caterpillar 3208 Diesel.

* One Ethyre 8000 gallon street flusher with a 750 gallon /minute centrifugal pump, 4-1/8 inch high velocity, wide pan flushing type nozzles and a 8 foot spray bar, 150 feet of 1 inch hose with reel and mounted on a Ford Model LT9000 truck chassis, 80,000 lbs. GVW, 270 Hp. Cummins diesel.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2. Additional Terms and Conditions (continued)

2.d The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways as follows and at sufficient treatment frequencies to ensure compliance:

i. The unpaved shoulders of all paved road segments which are listed above shall periodically be treated with Coherex (Witco Chemical Co.), or any other suitable dust suppressant, in order to minimize or eliminate at all times visible emissions of fugitive dust generated by vehicular traffic. The following or similar equipment shall be used for this purpose:

* One Surface Management Corp. 4000 gallon spray truck with 3-way piping for gravity discharge or suction via Gorman Rupp centrifugal pumps Model 84828 and spray bars and water cannon mounted on a 1979 Ford LT-9000 chassis, 50,000 lbs. GVW, 238 Hp.

* A chemical storage and truck loading station, including facilities and controls for preparing the proper chemical/water solutions, and 2-chemical storage tanks having a total capacity of 22,000 gallons.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.e The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas as follows and at sufficient treatment frequencies to ensure compliance:

i. All unpaved road segments which are listed above shall be treated periodically with Coherex(Witco Chemical Co), or other suitable dust suppressant, in order to minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic. The equipment identified above for the treatment of the unpaved shoulders of paved road segments shall also be used for the unpaved road segments. 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 a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2.g Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

2.h The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.i Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

2.j Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

a. paved roadways and parking areas*

minimum inspection frequency: daily

b. Unpaved shoulders *

minimum inspection frequencies:

Area B	once every 4 weeks
Area A and Area C	once every 2 weeks
Area D	once every 3 weeks

c unpaved roadways and parking areas*

minimum inspection frequency: daily

* As identified in Dwg. 585163 as submitted by the permittee with their PTO application on 8/10/94.

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from the Hamilton County Depatrment of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with Section A.1. of Part I of the General Terms and Conditions of this permit.

V. Testing Requirements

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: RM Storage Piles (F002)

Activity Description: Material storage piles throughout the facility. Surface area of all piles is approx. 1,830,000 sq ft.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-17-07(B)(6)	There shall be no visible particulate emission from any material storage pile except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule OAC 3745-17-03.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See A.I.2.b - A.I.2.d below
wind erosion from storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-17-07(B)(6)	There shall be no visible particulate emission from any material storage pile except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule OAC 3745-17-03.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See A.I.2.b-A.I.2.d below

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:

Metallurgical Coal Storage Pile(s), Taconite Storage Pile(s), Coke Storage Pile(s), Sinter Storage Pile(s), Sinter Ore Storage Pile(s).

2. Additional Terms and Conditions (continued)

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. In accordance with the permittee's permit application, the permittee has committed to treat the load-in and load-out material(s) with water and/or any other suitable dust suppression chemicals to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

i. Metallurgical Coal Storage Pile(s) shall be controlled as follows:

Load in shall be controlled by water spray and drop height reduction. Load out shall be controlled by water spray and bucket reclaimer. Wind erosion and vehicular traffic shall be controlled by water sprays.

ii. Permanent Taconite Pellets Storage Pile(s) shall be controlled as follows:

Load in shall be controlled by drop height reduction. Load out,wind erosion and vehicular traffic shall be controlled by water sprays.

iii.Temporary Taconite Pellets Storage Pile(s) shall be controlled as follows:

Load in, load out,wind erosion, and vehicular traffic shall be controlled by water sprays.

iv. Coke Storage Pile(s) shall be controlled as follows:

Load in, load out,wind erosion and vehicular traffic by water sprays

v. Sinter & Sinter Ore Storage Pile(s) shall be controlled as follows:

Load in, load out,wind erosion and vehicular traffic by water sprays

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

2.d The permittee shall employ reasonably available control measures for wind erosion from the surfaces of all storage piles 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 each storage pile with water and/or any other suitable dust suppression chemicals via the spray tower at sufficient treatment frequencies, to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.e The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile 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.

2.f 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 load-in and load-out operation at each storage pile in accordance with the following frequencies:

storage pile identification

Metallurgical Coal Storage Pile(s), Taconite Storage Pile(s), Coke Storage Pile(s), Sinter Storage Pile(s), Sinter Ore Storage Pile(s) and any area adjacent to the areas outlined above.

minimum inspection frequency

Spraying of water as a control measure shall be taken on a "as needed by observation " basis, with weather conditions considered. The observations to determine if water is needed shall be made, at a minimum on a daily basis. The application shall be such that the permittee shall eliminate or minimize the visible emissions of fugitive from the fugitive dust emissions units outlined above.

2. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

storage pile identification:

Metallurgical Coal Storage Pile(s), Taconite Storage Pile(s), Coke Storage Pile(s), Sinter Storage Pile(s), Sinter Ore Storage Pile(s) and any area adjacent to the areas outlined above.

minimum wind erosion inspection frequency:

daily

3. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity 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 purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

5. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

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

6. 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, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 6.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), 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 quarterly 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 1 - General Term and Condition A.1.c of this permit.

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:

There shall be no visible particulate emission from any material storage pile except for a period of time not to exceed thirteen minutes during any sixty-minute observation period.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22, and the procedures specified in OAC rule 3745-17-03(B)(3).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coal Hand.-No.2CP (F003)

Activity Description: This includes part of the metallurgical coal handling system for the Wilputte Coke Battery (No. 2 Coke Plant).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Coal unloading (bottom dumping from rail cars and truck dump unloading)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.
Conveyors Nos. 3 and 10 thru 14	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
Conveyor transfer points	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
Coal bunker (at breaker building)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.c below.
Coal bins (at larry car unloading station)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee shall maintain enclosures surrounding the unloading operations to minimize or eliminate visible emissions of fugitive dust and to comply with the visible emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.b The permittee shall maintain enclosures surrounding the transfer and conveying points identified in A.I.1 in such a manner as to minimize or eliminate visible emissions of fugitive dust and to comply with the visible emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.c The permittee shall maintain the total building enclosure surrounding the coal bunker (at breaker building) and the coal bins (at larry car loading station) in such a manner as to minimize or eliminate visible emissions of fugitive dust and to comply with the visible emission limitation specified in A.I.1 of these terms and conditions for this operation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions at the point of egress to the ambient air. 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 minimize or eliminate the 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.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the point of egress to the ambient air 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.

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.b Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Still Coal Handling (F004)

Activity Description: Still Coal handling (now used to feed the No. 2 Coke Plant)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Railcar unloading (rotary dump of railcars) equipped with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)(3)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.
Truck unloading (dump loading into hopper)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
Conveyor Nos. 302 thru 304 (from the rotary dump rail car unloading to the stacker/reclaimer at coal storage pile to transfer station 510)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Conveyor transfer point between conveyor No. 303 and No. 304 on mobile stacker/reclaimer	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
Conveyor Nos. 305 thru 311(from transfer station 510 to coal bins)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.c below.
Bar Grizzly	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.d below.
Coal mixing bins, equipped with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)(3)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a and A.I.2.b below.
Coal screening, coal crushing, conveyor transfer station No. 512, coal/oil mixer(at bulk density control station) and coal bins(at larry car loading station) equipped with baghouse.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)(3)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a and A.I.2.e below.

2. Additional Terms and Conditions

2.a The permittee shall use hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust from the rail car unloading operation to baghouse F004BH01, from the coal mixing bins, coal screening, coal crushing, conveyor transfer station No. 512, coal/oil mixer (at Bulk density control station) and coal bins (at larry car loading station) to baghouse F004BH02. The control equipment associated with the transfer and conveying operation shall meet the following requirements:

i. the collection efficiency shall be 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; and

ii. the control equipment shall achieve an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s) whichever is less stringent.

2.b The permittee shall employ water sprays at all times at the truck unloading area (dump loading into hopper), conveyors 302 thru 304, and coal mixing bins, to minimize or eliminate visible particulate emissions of fugitive dust and to comply with the visible emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.c The permittee shall maintain total enclosures for conveyors Nos. 305 thru 311(from transfer station 510 to coal bins) to minimize or eliminate visible particulate emissions of fugitive dust and to comply with the visible emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.d The permittee shall maintain enclosures at the bar grizzly to minimize or eliminate visible particulate emissions of fugitive dust and to comply with the visible emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.e If required to minimize or eliminate visible particulate emissions of fugitive dust and to comply with the visible emission limitation specified in A.I.a for the coal screening, coal crushing, conveyor transfer station No. 512, coal/oil mixer (at Bulk density control station) and coal bin (at larry car loading station) the permittee shall also employ the foam surfactant spray system.

II. Operational Restrictions

1. The pressure drop across baghouse F004BH01shall be maintained within the range of 4 - 6 inches of water while the emissions unit is in operation.

2. The pressure drop across baghouse F004BH02 shall be maintained within the range of 3 - 5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouses F004BH01 and F004BH02 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 each baghouse on a once per shift basis.

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 baghouses 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 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 perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit . The presence 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 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse F004BH01 and/or F004BH02 did not comply with the allowable range(s) specified above.

2. The permittee shall submit semiannual written reports which (a) identify all days during which visible particulate emissions were observed from the baghouses 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.

3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the point of egress to the ambient air 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.

4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.c Emission Limitation:

Particulate emissions from the exhaust gases exiting baghouses F004BH01 and F004BH02 shall not exceed 0.030 grain per dry standard cubic foor.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.d Emission Limitation:

no visible emissions from the baghouses

Applicable Compliance Method:

Compliance shall be determined using USEPA Method 22.

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emission test.

ii. The emission testing shall be conducted at the outlet of baghouses F004BH01 and F004BH02 to demonstrate compliance with the allowable mass emission limits for particulate emissions.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The pressure differential across each baghouse shall be recorded every five minutes during each test run. In addition, visible emission readings shall be performed for each baghouse throughout each test run, using USEPA Method 22.

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 Hamilton County Department of Environmental Services.

V. Testing Requirements (continued)

1.f Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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: Coke Hand.-No.2 CP (F005)

Activity Description: This includes the coke handling facility for the No. 2 Coke Plant.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Coke screening, transfer, and conveying at the coke screening station equipped with collection hood, exhaust duct and wet scrubber	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)(3)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. The permittee shall either vent fugitive dust emissions generated from the coke screening, transfer, and conveying operation to scrubber F005SC01 or apply dust suppresant chemicals to minimize or eliminate the generation of fugitive dust emissions from this operation. See A.I.2.a and A.I.2.e below for the requirements of these control options.
Coke unloading from push cars to wharfs	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Coke unloading from rail car or truck dumping into reclaim hoppers at No. 2 coke plant	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.c below.
Conveyors A, F-2, G, and No. 352	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.d below.
Conveyor transfer point No. 350 and all other transfer points not associated with the coke screening station.	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.d below.
Coke loading into railcars and trucks from the coke screening station	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.d below.

2. Additional Terms and Conditions

2.a The permittee shall use hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust from the coke screening, transfer, and conveying at the coke screening station to scrubber F005SC01. The control equipment associated with this operation shall meet the following requirements:

i. the collection efficiency shall be 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; and

ii. the control equipment achieves an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s) whichever is less stringent.

2.b The permittee shall employ quenching water at the No. 2 Coke Plant quenching tower that complies with the visible emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.c The permittee shall employ a wet suppression system to control fugitive particulate emissions from the coke unloading operation(rail car or truck dumping into reclaim hoppers at No. 2 coke plant). This system shall be capable of applying sufficient quanties of water to the coke prior to unloading to the reclaim hoppers to minimize or eliminate fugitive visible particulate emissions from the dumping of coal from the trucks into the reclaim area. Such application of water may be made using the existing wet suppression system at the point of origin of the coke or by application of water at subsequent handling and storage points. The wet suppression shall be accomplished to minimize or eliminate visible particulate emissions of fugitive dust to comply with the fugitive visible particulate emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.d The permittee shall maintain total enclosures to minimize or eliminate visible particulate emissions of fugitive dust comply with the visible emission limitations specified in A.I.1 of these terms and conditions for this operation.

2.e When not employing the control measures specified in A.I.2.a of these terms and conditions, the permitteee shall employ the foam surfactant dust supression system. The foam surfactant dust supression system shall be operated and maintained to minimize or eliminate visible emissions of fugitive dust and to comply with the fugitive visible particulate emission limitation specified in A.I.1.

II. Operational Restrictions

1. The scrubber water flow rates and recirculation water flow rates for scrubber F005SC01 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test which demonstrated the emissions unit was in compliance.

The minimum scrubber water flow rates and recirculation water flow rates shall be determined based on the average flow rates recorded during the most recent stack test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber F005SC01 while this emissions unit are in operation.

The permittee shall collect and record the following information:

a. the pressure drop across each scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber;

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

2. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions at the points of egress to the ambient air. 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 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 that the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

3. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions from the wet scrubber 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 following scrubber parameters were not maintained at or above the required levels for scrubber F005SC01:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

2. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions were observed escaping from the fugitive dust emission points specified in A.I.1 and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit semiannual written reports which (a) identify all days during which visible particulate emissions were observed escaping from the wet scrubber and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.c Emission Limitation:

Particulate emissions from the exhaust gases exiting scrubber F005SC01 shall not exceed 0.030 grain per dry standard cubic foot.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.d Emission Limitation:

no visible emissions from the wet scrubber

Applicable Compliance Method:

Compliance shall be determined using USEPA Method 22.

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emission testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emission testing.

ii. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emission testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the emission testing.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 of 40 CFR Part 60 Appendix A.

iv. The pressure drop across each scrubber, in inches of water, shall be recorded every five minutes during emission testing of this unit.

v. The scrubber water flow rate and recirculation water flow rate shall be recorded at fifteen-minute intervals during the stack test.

vi. In addition, visible emission readings shall be performed for each baghouse throughout each test run, using USEPA Method 22.

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 Hamilton County Department of Environmental Services.

1.f Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Ore Screen. & Hand. (F008)

Activity Description: This includes the ore screening and handling facility.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Ore surge hopper, vibrating feeders, and screeens	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below
Conveyors Nos. 101 thru 104, 107, 108, and 6	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.
Transfer points (all transfer points beginning with Conveyors 5 to 101, 101 to 102, 102 to ore sugre hopper to storage bin building(Recycle plant), flop gate to emergency pellet pile and conveyor 104 to 6 (to blast furance).	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The permittee shall employ a wet suppression system at all times to control fugitive particulate emissions from the ore screening and handling operations. This system shall be capable of applying sufficient quantities of water to minimize or eliminate fugitive visible particulate emissions from the emission points identified in A.I.1 of these terms and conditions. The wet suppression shall be accomplished to minimize or eliminate visible particulate emissions of fugitive dust and to comply with the fugitive visible particulate emission limitation specified in A.I.1 of these terms and conditions for this operation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions at the points of egress to the ambient air. 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 minimize or eliminate the 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 that the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall maintain monthly records of the total amount of ore processed in this emissions unit and the total volume of water employed in the wet suppression system.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions were observed at the points of egress to the ambient air 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.

2. The permittee shall submit semiannual reports that specify for each month the total amount of ore processed in this emissions unit and the total volume of water employed in the wet suppression system. These reports shall be submitted to the Hamilton County Department of Environmental Services 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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Iron Ore Unloading (F010)

Activity Description: This includes the railcar, truck dump, conveyors and transfer station for the conveyance of ore.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Railcar unloading (rotary dump)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below
Truck unloading (rear dump)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.
Conveyors	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.
Conveyor transfer points	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The permittee shall employ a wet suppression system at all times to control fugitive particulate emissions from the ore screening and handling operations. This system shall be capable of applying sufficient quantities of water to minimize or eliminate fugitive visible particulate emissions from the emission points identified in A.I.1 of these terms and conditions. The wet suppression shall be accomplished to minimize or eliminate visible particulate emissions of fugitive dust and to comply with the fugitive visible particulate emission limitation specified in A.I.1 of these terms and conditions for this operation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions at the points of egress to the ambient air. 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 minimize or eliminate the 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 that the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall maintain monthly records of the total amount of ore processed in this emissions unit and the total volume of water employed in the wet suppression system.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions were observed at the points of egress to the ambient air 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.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual reports that specify for each month the total amount of ore processed in this emissions unit and the total volume of water employed in the wet suppression system. These reports shall be submitted to the Hamilton County Department of Environmental Services 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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOF Deslagger (F011)

Activity Description: The molten iron deslagging operation is used to remove slag off of the hot metal ladle.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Molten iron deslagging equipped with a baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)(3)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
	OAC rule 3745-17-11(B)	Total particulate emissions from all stacks associated with this emissions unit, combined, shall not exceed 20.4 lbs/hr. See A.I.2.a below
Deslagging area	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.c below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 20.4 pounds per hour is based upon an uncontrolled emission rate of 250 lbs PE/hr and Figure II of OAC rule 3745-17-11. This limit is more stringent than that determined using the maximum process weight of 1000 tons per hour and Table I of OAC rule 3745-17-11.

2.b The permittee shall use hoods, fans, and other equipment to adequately enclose, contain, capture and vent the particulate emissions from the molten iron deslagging operation to baghouse F011BH01. The control equipment associated with the molten iron deslagging operation shall 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.c The permittee shall minimize or eliminate visible emisions of fugitive dust through the employment of RACM. These measures shall include, but not be limited to the removal (clean) kish from the deslagging area in a prompt manner to reduce or eliminate the emissions of excess kish. At a minimum, the deslagging area shall be thoroughly cleaned on a monthly basis.

II. Operational Restrictions

1. The pressure drop across baghouse F004BH01shall be maintained within the range of 4 to 12 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse F011BH01while the emissions unit is in operation. The monitoring equipment shall be installed, 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 once per shift basis.

2. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions at the points of egress to the ambient air. 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 minimize or eliminate the 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 that the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

3. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions from the baghouse 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 pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse F011BH01did not comply with the allowable range specified above.

2. The permittee shall submit semiannual written reports which (a) identify all days during which visible particulate emissions were observed from the baghouse 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.

3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the points of egress to the ambient air 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.

4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that the excess kish was not removed (cleaned) from the deslagging area. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the missed event occurs.

5. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.c Emission Limitation:

Total particulate emissions shall not exceed 20.4 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of baghouses F011BH01 to demonstrate compliance with the allowable mass emission limitation for particulates.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A.

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 Hamilton County Department of Environmental Services.

The pressure differential across each baghouse filter shall be recorded every five minutes during each test run.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BF Raw Matls Hand. (F012)

Activity Description: This includes the coke, iron ore, dolomite, and sinter handling equipment for No. 3 Blast Furnace.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Railcar unloading	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.
Stockhouse storage bins	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b. below.
Stockhouse conveyors	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
Skip cars used in conveying operation	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
Stockhouse transfer points	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.

2. Additional Terms and Conditions

2.a The permittee shall at all times during the unloading operations employ a wet suppression system and maintain existing enclosures to control fugitive particulate emissions from such operations. This system shall be capable of applying sufficient quanties of water to minimize or eliminate fugitive visible particulate emissions from all the emission points identified in A.I.1 of these terms and conditions. The wet suppression shall be accomplished in such a manner as to comply with the visible fugitive visible particulate emission limitation specified in A.I.1 of these terms and conditions for this operation.

2.b The permittee shall maintain the existing enclosures for storage bins, conveyors, and transfer points to minimize or eliminate visible particulate emissions of fugitive dust to ensure compliance with the visible fugitive particulate emission limitation specified in A.I.1 of these terms and conditions.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions at the points of egress to the ambient air. 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 minimize or eliminate the 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 that the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

2. The permittee shall maintain daily records of the total volume of water employed in the wet suppression system to control fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the points of egress to the ambient air 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.

2. The permittee shall submit semiannual reports that specify for each month the total volume of water employed in the wet suppression system. These reports shall be submitted to the Hamilton County Department of Environmental Services 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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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: Slab Scarfing/Slitting (F015)

Activity Description: This includes the hand scarfing and slitting of steel slabs.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Hand scarfing and slitting of steel slabs	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The permittee shall employ good engineering practices to minimize or eliminate the emission of fugitive visible particulate emissions. These practices shall include:

i. the permittee shall remove scarfing residue from the slab scarfing area in a prompt manner to reduce or eliminate particulate emissions. At a minimum, the deslagging area shall be thoroughly cleaned on a monthly basis; and

ii. the permittee shall maintain manufacturer's recommended air to fuel mixtures in the burning torches used in the scarfing area.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible fugitive particulate emissions at the points of egress to the ambient air. 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 minimize or eliminate the 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 that the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the points of egress to the ambient air 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.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Landfill (F020)

Activity Description: The disposal of nonhazardous sludges and flue dust occurs here.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sludges and flue dust unloading (refuse disposal)	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a and A.I.2.b below.

2. Additional Terms and Conditions

2.a The permittee shall employ reasonably available control measures for the above-identified material handling operation for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measures to ensure compliance:

material handling operation:

sludges and flue dust unloading (refuse disposal):

control measures:

i. ensure that solid wastes are deposited, spread and compacted in such a manner as to minimize or eliminate visible emissions of fugitive dust;

ii. require all truck loads of solid waste to be unloaded in a manner which will minimize the drop height;

iii. all dusty materials or wastes likely to become airborne shall be watered as necessary prior to or during dumping operations in such a manner as to minimize or eliminate visible emissions of fugitive dust;

iv. watering shall be done in such a manner as to avoid the pooling of liquids and runoff;

v. no dusty materials shall be dumped during periods of high winds speeds unless it has been treated to prevent it from becoming airborne; and,

vi. 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.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.b For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform daily inspections of each of the operations.

2. The above-mentioned inspections for the landfill operations shall be performed during representative, normal operating conditions.

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

3. The permittee shall maintain records of the following information for the material handling operations:

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 3.d. 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 quarterly deviation reports that identify any of the following occurrences for the material handling operation:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

2. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Plantwide Gasoline (G001)

Activity Description: This is the Pickler Bldg, BOF, and Main Garage diesel and gasoline dispensing facilities.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Gasoline Storage Tanks - One (1) 15,000 Gallon, One (1) 2,000 Gallon and Three (3) 500 Gallon Underground Storage Tanks	OAC rule 3745-21-09(R)	Stage I vapor control - 90% control efficiency for VOCs, submerged fill
Gasoline Dispensing Operation - Four (4) dispensing nozzles, Stage II vapor recovery	OAC rule 3745-21-09(DDD)	Stage II vapor control - 95% control efficiency for VOCs

2. Additional Terms and Conditions

2.a Pursuant to OAC rule 3745-21-09 (DDD)(1)(b), the Stage II vapor control system shall be installed, operated, and maintained in accordance with the applicable certification granted by the California Air Resources Board (CARB) as described in Part II, Section F below.

Any figures or exhibits identified in this permit are available from the appropriate Ohio EPA District Office or local air agency upon request.

II. Operational Restrictions

1. The permittee shall comply with the following operational restrictions for the Stage I vapor control system:

a. The vapor balance system shall be kept in good working order and shall be used at all times during the transfer of gasoline.

b. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.

c. There shall be no leaks in the vapor lines or liquid lines during the transfer of gasoline.

d. The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

e. All fill caps shall be "in place" and clamped during normal storage conditions.

f. The permittee shall repair within 15 days any leak from the vapor balance system or vapor control system which is employed to meet the requirements of paragraph (R)(1) of OAC rule 3745-21-09 when such leak is equal to or greater than 100 percent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.

II. Operational Restrictions (continued)

2. The permittee shall comply with the following operational restrictions for the Stage II vapor control system:

a. The vapor control system shall be installed, operated and maintained in accordance with the manufacturer's specifications and the applicable certification granted by the CARB, and shall be free of the following defects:

i. Any component, that is required to be employed at all times pursuant to the system certification granted by the CARB, is absent or disconnected.

ii. A vapor hose is crimped or flattened such that the vapor passage is blocked, or the pressure drop through the vapor hose exceeds by a factor of two or more the requirements in the certification granted by the CARB.

iii. A vacuum producing device is inoperative or malfunctioning.

iv. Pressure/vacuum relief valves, vapor check valves, or dry breaks are inoperative.

v. Any vapor recovery equipment is leaking liquid gasoline or gasoline vapors.

vi. Any other equipment defect identified in the CARB certification as one which substantially impairs the effectiveness of the vapor control system.

b. The vapor control system must have successfully passed the testing requirements contained in paragraph (DDD)(2) of OAC rule 3745-21-09. These testing requirements are also specified in Part II, Section E.

c. Operating instructions for the vapor control system shall be conspicuously posted in each gasoline dispensing area. The operating instructions shall clearly describe how to properly fuel motor vehicles and shall specifically prohibit the topping off of the motor vehicle fuel tank.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the results of any leak checks, including, at a minimum, the following information:

a. Date of inspection.

b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak).

c. Leak determination method.

d. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days).

e. Inspector's name and signature.

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

2. The permittee shall maintain records of the following information:

a. The quantity of gasoline delivered to the facility during each calendar month.

b. The results of any tests performed pursuant to the testing requirements specified in this permit.

c. A log of the date and description of all repair and maintenance work performed (including, but not limited to, work performed to meet manufacturer's specifications or CARB certification requirements), or any other modifications made to the vapor control system.

d. A copy of the most recent permit to operate application (including appendix) submitted to the Ohio EPA.

e. A copy of the most recent permit to operate issued by the Ohio EPA.

f. Proof of attendance and completion of the training required by the Ohio EPA for the operator or local manager of the gasoline dispensing facility.

g. Copies of all completed post test inspection forms.

IV. Reporting Requirements

1. Any leak from the vapor balance system or vapor control system that is not repaired within 15 days after identification shall be reported to the Director within 30 days after the repair is completed.

2. A comprehensive written report on the results of any tests performed in accordance with the requirements of this permit shall be submitted within 30 days following the completion of the tests.

V. Testing Requirements

1. The Stage II vapor control system must successfully meet all requirements regarding testing contained in OAC rule 3745-21-09(DDD)(2). In accordance with the test procedures listed in OAC rule 3745-21-10, the following tests shall be performed: static leak test and dynamic pressure performance test.

At intervals not to exceed five (5) years, the permittee shall repeat and demonstrate compliance with the static leak test requirements contained in OAC rule 3745-21-10, Appendix A (unless a greater frequency is specified in the applicable CARB certification), and the dynamic pressure performance test requirements contained in OAC rule 3745-21-10, Appendix B (unless the dynamic pressure performance test is not applicable to the specific Stage II vapor control system, as specified in the applicable CARB certification).

Not later than thirty (30) days prior to any required tests, the permittee shall submit a test notification to the appropriate Ohio EPA District Office or local air agency.

The test notification shall describe the proposed test methods and procedures, the time and the date of the tests, and the person who will be conducting the tests. Failure to submit such notification prior to the tests may result in the Ohio EPA's refusal to accept the results of the tests. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information during the tests. After completion of any tests, the permittee shall complete and retain on site a copy of the post test inspection form contained in OAC rule 3745-21-10, Appendix C.

VI. Miscellaneous Requirements

1. The Vapor Balance Stage II vapor recovery system employed at this facility, including all associated underground and aboveground plumbing, shall be installed, operated, and maintained in accordance with CARB Executive Order G-70-52-AM, which includes, but is not limited to, the requirements contained within this Section.

VI. Miscellaneous Requirements (continued)

2. The permittee shall comply with the following design and installation specifications from CARB Executive Order G-70-52-AM:

a. The equipment approved for use with the Vapor Balance system is specified in Exhibit 2 of Executive Order G-70-52-AM. Other equipment may not be used unless approved by CARB for use with the Vapor Balance system.

b. Coaxial hose assemblies shall be installed in accordance with Exhibit 5, 8a, 8b, 8c, 9a, 9b, 9c, 10, 11, or 11a of Executive Order G-70-52-AM and may not touch the island or the ground when not in use.

c. Each vent pipe shall be equipped with a CARB certified pressure/vacuum relief valve. A pressure/vacuum relief valve(s) with the following setting(s) is preferred:

i. Pressure: Three (3.0) +/- one-half (0.5) inches of water column
ii. Vacuum: Eight (8.0) +/- two (2.0) inches of water column

d. Vapor plumbing may be manifolded to reduce the number of pressure/vacuum relief valves needed. Vent manifolds are specifically prohibited for the Vapor Balance system unless an underground manifold also exists.

3. The permittee shall comply with the following operational restrictions from CARB Executive Order G-70-52-AM:

a. The vapor control system shall employ only coaxial hoses, and the use of remote check valves is prohibited.

b. Any alteration of the equipment, parts, design, or operation of the Vapor Balance system is prohibited unless approved by CARB.

c. The maximum dispensing rate shall not exceed ten (10.0) gallons per minute (gpm). Compliance with this condition shall be verified with only one nozzle in operation per product supply pump.

d. A nozzle boot is considered to be defective, and shall be immediately repaired or replaced if the nozzle boot is torn in one or more of the following manners:

i. A triangular-shaped or similar tear one half inch or more to a side, or a hole one half inch or more in length.
ii. A slit one inch or more in length.

e. A nozzle faceplate is considered to be defective, and shall be immediately repaired or replaced if damaged in one or more of the following manners:

i. The capability to achieve a seal with a fill pipe interface is affected for one fourth of the circumference of the faceplate (accumulated).
ii. More than one fourth of the flexible cone is missing.

4. The permittee shall comply with the following monitoring requirement from CARB Executive Order G-70-52-AM:

The permittee shall monitor the Stage II vapor recovery system performance and all aspects of operation to the extent necessary to ensure compliance with the conditions and specifications contained within this Section.

5. The permittee shall comply with the following record keeping requirement from CARB Executive Order G-70-52-AM:

A log of the date and description of all repair and maintenance work performed on the Vapor Balance system shall be maintained on site or otherwise provided to Ohio EPA field office personnel immediately upon request.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Shops Spray Paint. (K001)

Activity Description: This is a miscellaneous metal parts spray painting operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
miscellaneous metal parts coating area (no stack emissions)	OAC rule 3745-21-09(U)(2)(e)(ii)	See A.I.2.a below
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.b below.

2. Additional Terms and Conditions

2.a Although the requirements of OAC rule 3745-21-09(U) allow for an exemption from applicable VOC content limitations, the daily usage exemption allowed in accordance with OAC 3745-21-09(U)(2)(e)(ii) is not part of the federally-approved SIP (for the Cincinnati ozone area). The rule has been revised to reflect an exemption level (3 gallons per day) that is acceptable to USEPA. Therefore, the 3 gallons per day usage restriction shall apply as the exemption level while OAC rule 3745-21-09(U) is being approved by USEPA, as well as after USEPA approval.

2.b The permittee shall employ good operating practices when spray coating operations are performed in order to minimize fugitive PE. These practices shall include maximizing paint transfer efficiency and directing coating spray in a downward direction whenever possible.

II. Operational Restrictions

1. The permittee shall employ no more than 3 gallons of coating in any one day in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each calendar day the coating line is in operation:

a. the name and identification number of each coating employed;

b. the volume, in gallons, of each coating employed; and

c. the total volume, in gallons, of all of the coatings employed during the calendar day.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance 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:

Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

Visible PE observations shall be made at egress points (i.e., doors closest to the spray coating operation) of the building housing the spray coating operation.

1.b Compliance with the three gallon per day usage limitation may be demonstrated by the information collected and recorded in A.III.1 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Slab Fce/WHB (P009)

Activity Description: Davy International walking beam slab reheat furnace reheats steel slabs, associated waste heat boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
376 mmBtu/hr, direct fired, natural gas, coke oven gas, No. 6 fuel oil, and used oil, reheat furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(2)	Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of fuel oil or used oil.

2. The quality of the coke oven gas and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven gas collected.

3. The permittee shall burn only natural gas, fuel oil, used oil, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,) or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

2. The permittee shall collect representative samples of coke oven gas burned. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas and natural gas burned;

b. the sulfur content, percent by weight, of the coke oven gas (The average sulfur content shall be determined by the Tuwiler Method and the resulting hydrogen sulfide content expressed in grains hydrogen sulfide per 100 dscf of gas. The grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S and times 0.94 pound of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas(0.036 pound per cubic feet). The sulfur content may be directly measured using ASTM Method D1072-90(1999) Standard Test Method for Total Sulfur in Fuel Gases.);

c. the heat content of coke oven gas (The heat content shall be determined by use ASTM Method D3588-98(2003) Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels and shall be expressed in BTU per cubic foot), the average heat content of natural gas shall assumed to be 1000 Btu/cubic foot.); and

d. the average sulfur dioxide emission rate for the coke oven gas, recorded as pounds of SO2/mmBtu actual heat input. (The resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate.

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

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

3. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, or coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.2.a. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, and/or coke oven 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:

Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning gaseous fuels.

(iii) If required, the permittee shall demonstrate compliance with this emission rate while burning No. 6 fuel oil mixed with used oil in proportion to that burned under normal operating conditions, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 Slab Fce/WHB (P010)

Activity Description: Davy International walking beam slab reheat furnace reheats steel slabs, associated waste heat boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
376 mmBtu/hr, direct fired, natural gas, coke oven gas, No. 6 fuel oil, and used oil, reheat furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(2)	Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of fuel oil or used oil.

2. The quality of the coke oven gas and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven gas collected.

3. The permittee shall burn only natural gas, fuel oil, used oil, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,) or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

2. The permittee shall collect representative samples of coke oven gas. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas and natural gas burned;

b. the sulfur content, percent by weight, of the coke oven gas (The average sulfur content shall be determined by the Tuwiler Method and the resulting hydrogen sulfide content expressed in grains hydrogen sulfide per 100 dscf of gas. The grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S and times 0.94 pound of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas(0.036 pounds per cubic feet). The sulfur content may be directly measured using ASTM Method D1072-90(1999) Standard Test Method for Total Sulfur in Fuel Gases.);

c. the heat content of coke oven gas (The heat content shall be determined by use ASTM Method D3588-98(2003) Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels and shall be expressed in BTU per cubic foot), the average heat content of natural gas shall assumed to be 1000 Btu/cubic foot.); and

d. the average sulfur dioxide emission rate for the coke oven gas, recorded as pounds of SO2/mmBtu actual heat input. (The resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate.

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

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

3. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, or coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.2.a. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, and/or coke oven 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:

Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning gaseous fuels.

(iii) If required, the permittee shall demonstrate compliance with this emission rate while burning No. 6 fuel oil mixed with used oil in proportion to that burned under normal operating conditions, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 Slab Fce/WHB (P011)

Activity Description: Salem pusher slab reheat furnace reheats steel slabs, associated waste heat boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
376 mmBtu/hr, direct fired, natural gas, coke oven gas, No. 6 fuel oil, and used oil, reheat furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(2)	Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of fuel oil or used oil.

2. The quality of the coke oven gas and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven gas collected.

3. The permittee shall burn only natural gas, fuel oil, used oil, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,) or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

2. The permittee shall collect representative samples of coke oven gas burned. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas and natural gas burned;

b. the sulfur content, percent by weight, of the coke oven gas (The average sulfur content shall be determined by the Tuwiler Method and the resulting hydrogen sulfide content expressed in grains hydrogen sulfide per 100 dscf of gas. The grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S and times 0.94 pound of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas(0.036 pound per cubic feet). The sulfur content may be directly measured using ASTM Method D1072-90(1999) Standard Test Method for Total Sulfur in Fuel Gases.;

c. the heat content of coke oven gas (The heat content shall be determined by use ASTM Method D3588-98(2003) Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels and shall be expressed in BTU per cubic foot), the average heat content of natural gas shall assumed to be 1000 Btu/cubic foot.); and

d. the average sulfur dioxide emission rate for the coke oven gas, recorded as pounds of SO2/mmBtu actual heat input. (The resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate.

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

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

3. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, or coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.2.a. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, and/or coke oven 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:

Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning gaseous fuels.

(iii) If required, the permittee shall demonstrate compliance with this emission rate while burning No. 6 fuel oil mixed with used oil in proportion to that burned under normal operating conditions, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Slab Fce/WHB (P012)

Activity Description: Davy International walking beam slab reheat furnace reheats steel slabs, associated waste heat boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
376 mmBtu/hr, direct fired, natural gas, coke oven gas, No. 6 fuel oil, and used oil, reheat furnace	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-15(C)(2)	Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

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 matter 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.

II. Operational Restrictions

1. The quality of the fuel oil and used oil burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for each shipment of fuel oil or used oil.

2. The quality of the coke oven gas and natural gas burned in this emissions unit shall have a cominbation of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.1 pound sulfur dioxide/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the coke oven gas collected.

3. The permittee shall burn only natural gas, fuel oil, used oil, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,) or equivalent methods as approved by the Director.

The permittee shall maintain records of the fuel oil and used oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of fuel oil or used oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil or used oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

2. The permittee shall collect representative samples of coke oven gas burned. At a minimum the samples shall be collected on a weekly basis. Based on the samples collected, the following monthly records shall be collected and recorded:

a. the total cubic feet of coke oven gas and natural gas burned;

b. the sulfur content, percent by weight, of the coke oven gas (The average sulfur content shall be determined by the Tuwiler Method and the resulting hydrogen sulfide content expressed in grains hydrogen sulfide per 100 dscf of gas. The grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of coke oven gas shall be converted to a decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S and times 0.94 pound of sulfur per 1 pound of H2S, and dividing by the density of coke oven gas(0.036 pound per cubic feet). The sulfur content may be directly measured using ASTM Method D1072-90(1999) Standard Test Method for Total Sulfur in Fuel Gases.);

c. the heat content of coke oven gas (The heat content shall be determined by use ASTM Method D3588-98(2003) Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels and shall be expressed in BTU per cubic foot), the average heat content of natural gas shall assumed to be 1000 Btu/cubic foot.); and

d. the average sulfur dioxide emission rate for the coke oven gas, recorded as pounds of SO2/mmBtu actual heat input. (The resulting decimal fraction of sulfur and heat content determined in (b) and (c) above shall be used as input into the equation defined in OAC rule 3745-18-04(F) to calculate the sulfur dioxide emission rate.

The sulfur dioxide emission rate from the combustion of natural gas shall be considered to be equal to 0.0 pounds of sulfur dioxide per mm/Btu.

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

3. For each day during which the permittee burns a fuel other than natural gas, fuel oil, used oil, or coke oven 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the lb SO2/MMBtu limitation specified in A.I.2.a. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, fuel oil, used oil, and/or coke oven 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:

Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III.1 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning fuel oil or used oil.

(ii) The record keeping in Section A.III.2 of these terms and conditions shall be used to determine compliance with the SO2 emission limitation when burning gaseous fuels.

(iii) If required, the permittee shall demonstrate compliance with this emission rate while burning No. 6 fuel oil mixed with used oil in proportion to that burned under normal operating conditions, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Coating Line (P019)

Activity Description: The No. 4 Coating Line is an aluminum coating of steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
direct fired, natural gas, pre-heater	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
rust preventative oil application (no stack)	OAC rule 3745-21-09(OO)(2)	The VOC of the rust preventative oil employed shall not exceed 1.1 pounds of VOC per gallon of oil, excluding water and exempt solvents.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.c below.
anti-galling spray application (no stack)	OAC rule 3745-21-09(OO)(3)	The VOC of the anti-galling material employed shall not exceed 6.4 pounds of VOC per gallon of material, excluding water and exempt solvents.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Aluminum Coating Pot	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.c below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from the combustion of natural gas in 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 matter 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 shall minimize overspray when coating operations are performed in order to minimize or eliminate fugitive PE.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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.

2. The permittee shall collect and record the following information on a monthly basis:

a. the name and identification of each rust preventative oil employed; and

b. the VOC content, as applied, excluding water and exempt solvents, in pounds per gallon, of each rust preventative oil employed.

3. The permittee shall collect and record the following information on a monthly basis:

a. the name and identification of each anti-galling material employed; and

b. the VOC content, as applied, minus water and exempt solvents, in pounds per gallon, of each anti-galling material employed.

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

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 minimize or eliminate the 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.

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

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a noncompliant rust preventative oil or anti-galling material was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the point of egress to the ambient air 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.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

Visible PE observations shall be made at egress points (i.e., doors closest to the spray coating operation) of the building housing the spray coating operation.

V. Testing Requirements (continued)

1.b Compliance with the VOC content limitations specified in A.I.1 may be demonstrated by the information collected and recorded in A.III.2 and A.III.3 of these terms and conditions.

The VOC content of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Coating Line (P022)

Activity Description: The No. 3 Coating Line is a zinc coating of steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
direct fired natural gas pre-heater	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
rust preventative oil application (no stack)	OAC rule 3745-21-09(OO)(2)	The VOC of the rust preventative oil employed shall not exceed 1.1 pounds of VOC per gallon of oil, excluding water and exempt solvents.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.c below.
Zinc coating pot	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.c below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from the combustion of natural gas in 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. Additional Terms and Conditions (continued)

2.b This emissions unit is exempt from the visible particulate matter 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 shall operate this emission unit in such a manner as to minimize fugitive PE during the rust preventative oil application and zinc coating operation.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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.

2. The permittee shall collect and record the following information on a monthly basis:

a. the name and identification of each rust preventative oil employed; and

b. the VOC content, as applied, minus water and exempt solvents, in pounds per gallon, of each rust preventative oil employed.

3. The permittee shall perform weely checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 minimize or eliminate the 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.

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

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a non-compliant rust preventative oil was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the point of egress to the ambient air 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.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

Visible PE observations shall be made at egress points (i.e., doors closest to the spray coating operation) of the building housing the spray coating operation.

1.b Compliance with the VOC content limitation specified in A.I.1 may be demonstrated by the information collected and recorded in A.III.2 of these terms and conditions.

The VOC content of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 5 Pickler (P023)

Activity Description: The Wean Unique HCI Pickler is used to remove scale from hot rolled steel.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Number 5 continuous steel pickling line using HCl, equipped with wet scrubbers controlling the emissions from the pickling tank and rinse tank	40 CFR Part 63 Subpart CCC	See A.I.2.b and A.II.7-A.II.10, and A.II.12 below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the wet scrubber outlets shall not exceed twenty percent opacity as a six-minute average.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the wet scrubber outlets from steel pickling line number 5 shall not exceed 65.0 pounds per hour. See A.I.2.d below.
Rust preventative oil application	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.c below.
	OAC rule 3745-21-09(OO)(2)	The VOC content of the rust preventative oil employed shall not exceed 1.1 pounds of VOC per gallon of oil, excluding water and exempt solvents.

2. Additional Terms and Conditions

2.a The permittee is subject to the General Provisions of 40 CFR Part 63, Subpart A, identified in Table 1 of 40 CFR Part 63 Subpart CCC.

2. Additional Terms and Conditions (continued)

2.b The permittee shall not cause or allow to be discharged into the atmosphere from this pickling line:

i. Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or

ii. HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

2.c The permittee shall operate the pickling line in such a manner as to minimize fugitive PE.

2.d The particulate emissions limitation of 65.0 pounds per hour is based upon a process weight rate of 364 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 65.0 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

1. The permittee shall adhere to the Operation and Maintenance Plan required in 40 CFR 63.1160(b)(2) for each emission control device associated with this emissions unit. At a minumum the Operation and Maintenace Plan is required to comply with the provisions of 40 CFR Part 63.1160(b)(2).

2. The permittee shall operate and maintain this emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

3. Scrubber P023SC01 shall be equipped with a viewport or access hatch allowing visual inspection of the scrubber operation. Should the permittee not equip scrubber P023SC01 with a viewport or access hatch an alternative method of inspection approved by the Hamilton County Department of Environmental Services is required.

4. For scrubber P023SC01, the permittee shall provide for cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling.

5. For scrubber P023SC01, the permittee shall follow the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans.

6. The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the Operation and Maintenance Plan identified in A.II.1. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.

7. The scrubber water flow rate and recirculation water flow rate for scrubber P023SC01 shall be maintained at or above the minimum scrubber water flow rate and recirculation water flow rate established during the initial stack test which demonstrated the emission unit to be in compliance. The procedures specified in 40 CFR 63.1161(b) shall be followed to determine the minimum scrubber flow rates and the minimum recirculation flow rates.

Operation of wet scrubber P023SC01 with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in 40 CFR 63.1160(b)(2).

The permittee may reestablish compliant operating parameter values for the scrubber water flow rates and recirculation flow rates as part of any performance test that is conducted subsequent to the initial test or tests.

8. All HCl emissions from the pickle tank shall be vented to scrubber P023SC01.

The pressure drop across the scrubber P023SC01 shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.

II. Operational Restrictions (continued)

9. All HCl emissions from the rinse tank shall be vented to scrubber P023SC02.

The pressure drop across the scrubber P023SC02 shall be continuously maintained at a value of not less than 1 inches of water at all times while the emissions unit is in operation.

10. The permittee shall provide and operate, except during loading and unloading of acid, a closed-vent system for each Hydrochloric acid storage vessel associated with this pickling line. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

11. The scrubber water flow rates and recirculation water flow rates for scrubber P023SC02 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test which demonstrated the emission unit to be in compliance.

The minimum scrubber water flow rates and recirculation water flow rates shall be determined based on the average flow rates recorded during the most recent stack test that demonstrated the emission unit to be in compliance. The scrubber water flow rate and recirculation water flow rate shall be recorded at fifteen-minute intervals during the stack test.

12. Should the rinse tank solution exceed a hydrochloric acid content of six percent by weight and a temperature of 100 degrees F., the rinse tank shall become subject to the requirements of 40 CFR Part 61 Subpart CCC.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a record of each inspection performed for scrubber P023SC01. Each inspection shall be signed by the responsible maintenance official and show the date of each inspection, any problem(s) identified, a description of repair(s), replacement(s), or other corrective action(s) taken, and the date of the repair(s), replacement(s), or other corrective action(s) taken. At a minimum the inspections conducted must comply with 40 CFR 63.1160(b)(2)(iv). The requirements of 40 CFR 63.1160(b)(2)(iv) are as follows:

Scrubber P023SC01 shall be inspected at intervals of no less than 3 months. Based on this inspection, the following actions are required when problems are noted:

a. cleaning or replacement of any plugged spray nozzles or other liquid adelivery devices;

b. repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

c. repair or replacement of droplet eliminator elements as needed;

d. repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

e. adjustment of damper settings for consistency with the required air flow.

2. The permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.

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

3. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P023SC01 while these emissions unit are in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

The permittee shall collect and record the following information:

a. the pressure drop across each scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber;

e. manufacturer certification that monitoring devices are accurate to within 5 percent; and

f. the date, the method used, and the results of the annual calibration requirements.

Failure to record each of the operating parameters listed in paragraph 40 CFR 63.1162(a)(2) is a violation of the monitoring requirements of 40 CFR Part 60, Subpart CCC.

4. The owner or operator of an affected hydrochloric acid storage vessel shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

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

5. As required by 40 CFR 63.10(b)(2) of subpart A, the owner or operator shall maintain records for 5 years from the date of each record of:

a. the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

b. the occurrence and duration of each malfunction of the air pollution control equipment;

c. all maintenance performed on the air pollution control equipment;

d. actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

e. all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan;

f. all required measurements needed to demonstrate compliance with 40 CFR Part 63, Subpart CCC, and to support the data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

g. all results of initial or subsequent performance tests;

h. all documentation supporting initial notifications and notifications of compliance status; and

i. records of any applicability determination, including supporting analyses.

6. The permittee shall keep the written Operation and Maintenance Plan on record after it is developed to be made available for inspection, upon request, by the Hamilton County Department of Environmental Services for the life of the emissions unit or until the emissions unit is no longer subject to the provisions of 40 CFR Part 63, Subpart CCC. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Hamilton County Department of Environmental Services for a period of 5 years after each revision to the plan.

7. The permittee shall collect and record the following information on a monthly basis:

a. the name and identification of each rust preventative oil employed; and

b. the VOC content, as applied, excluding water and exempt solvents, in pounds per gallon, of each rust preventative oil employed.

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

8. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P023SC02 while these emissions unit are in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for the scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for the scrubber, in gallons per minute, on a once per shift basis; and

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber.

9. The permittee shall collect and record the hydrochloric acid content, in percent by weight, and the temperature in degrees F. of the rinse tank solution on an annual basis.

10. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 minimize or eliminate the 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.

IV. Reporting Requirements

1. The permittee shall submit an annual report identifying the dates the inspections required in A.III.1 and A.III.4 were conducted, a listing of any problems identified during the inspection, a listing of corrective actions taken to correct any problems identified, and the date the corrective actions was taken.

2. As required by 40 CFR 63.10(d)(5)(i), the permittee shall submit the following reports:

a. if actions taken by the permittee during a startup, shutdown, or malfunction of this emission unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner or operator shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; or

b. any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR 63.10(d)(5)(ii).

IV. Reporting Requirements (continued)

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels for scrubbers P023SC01 and P023SC02:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

Should any deviations occur, the corrective action taken to remedy the deviation, along with the date the corrective action taken shall be submitted.

4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a noncompliant rust preventative oil was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

5. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any annual record showing a rinse tank solution hydrochloric acid content greater than six percent by weight and a rinse tank temperature greater than 100 degrees F. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.

6. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

7. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the point of egress to the ambient air 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.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

Visible PE observations shall be made at egress points of the building housing the coating operation.

1.b Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.c Compliance with the VOC content limitation specified in A.I.1 may be demonstrated by the information collected and recorded in A.III.7 of these terms and conditions.

If required, the VOC content of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

1.d Compliance with the operational restrictions listed in A.II.7-A.II.9 shall be determined by the information collected and recorded in A.III.3.

1.e Emission Limitation:

Total particulate emissions from the wet scrubber outlets P023SC01 and P023SC02 combined shall not exceed 65 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 or 26A and the procedures specified in OAC rule 3745-17-03(B)(10).

1.f Emission Limitation:

Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or

HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 26A.

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

i. Tthe emission testing shall be conducted within 2.5 years after the initial performance test which demonstrated compliance with the emission limitation specified in A.I.2.b. of this permit. The testing shall be conducted for scrubber P023SC01. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing. As required in 40 CFR 63.1162(a)(1) the maximum time period between testing shall be 2.5 years.

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation specified in A.I.2.b. of this permit.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s).

40 CFR Part 60, Appendix A, Methods 1-4 and Method 26(A).

In addition to the above mentioned methods, the permittee shall follow the procedures and methods specified in 40 CFR 63.1161(a) and (b), Performance Testing and Test Methods established to comply with 40 CFR Part 63 Subpart CCC.

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 Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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

i. The emission testing shall be conducted within 3 months of the effective date of this permit. The testing shall be conducted for scrubbers P023SC01 and P023SC02 to determine a total particulate emissions emission rate. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing;

ii. The emission testing shall be conducted at the outlet of the scrubbers P023SC01 and P023SC02 to demonstrate compliance with the allowable mass emission limitation for particulates of 65 lbs per hour (total combined emissions from scrubbers P023SC01 and P023SC02);

iii. A particulate emissions test also shall be conducted at the inlet of the scrubbers P023SC01 and P023SC02 to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11; and

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and/or 26A of 40 CFR Part 60, Appendix A.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

1.i Compliance with the operational restrictions listed in A.II.11 shall be determined by the information collected and recorded in A.III.8.

V. Testing Requirements (continued)

1.j Compliance with the operational restrictions listed in A.II.12 shall be determined by the information collected and recorded in A.III.9.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Pickler (P024)

Activity Description: The Wean Unique HCl Pickler is used to remove scale from hot rolled steel.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Number 4 continuous steel pickling line using HCl, equipped with wet scrubbers controlling the emissions from the pickling tank and rinse tank and a scale breaking operation vented to a baghouse	40 CFR Part 63 Subpart CCC	See A.I.2.b and A.II.7-A.II.10, and A.II.12 below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the wet scrubber outlets shall not exceed twenty percent opacity as a six-minute average.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the wet scrubber outlets from steel pickling line number 5 shall not exceed 65.0 pounds per hour. See A.I.2.d below.
Rust preventative oil application	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.c below.
	OAC rule 3745-21-09(OO)(2)	The VOC content of the rust preventative oil employed shall not exceed 1.1 pounds of VOC per gallon of oil, excluding water and exempt solvents.
Scale breaker vented to baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)	See A.I.2.e below

2. Additional Terms and Conditions

2.a The permittee is subject to the General Provisions of 40 CFR Part 63, Subpart A, identified in Table 1 of 40 CFR Part 63 Subpart CCC.

2.b The permittee shall not cause or allow to be discharged into the atmosphere from this pickling line:

i. Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or

ii. HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

2.c The permittee shall operate the pickling line in such a manner as to minimize fugitive PE.

2.d The particulate emissions limitation of 65.0 pounds per hour is based upon a process weight rate of 364 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 65.0 lbs/hour, the permittee shall comply with the more stringent limitation.

2.e The permittee shall use hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust from the scale breaking operation. The control equipment associated with the scale breaking operation shall meet the following requirements:

i. the collection efficiency shall be 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; and

ii. the control equipment achieves an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s) whichever is less stringent.

II. Operational Restrictions

1. The permittee shall adhere to the Operation and Maintenance Plan required in 40 CFR 63.1160(b)(2) for each emission control device associated with this emissions unit. At a minumum the Operation and Maintenace Plan is required to comply with the provisions of 40 CFR Part 63.1160(b)(2).

2. The permittee shall operate and maintain this emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

3. Scrubber P0243SC01 shall be equipped with a viewport or access hatch allowing visual inspection of the scrubber operation. Should the permittee not equip scrubber P024SC01 with a viewport or access hatch an alternative method of inspection approved by the Hamilton County Department of Environmental Services is required.

4. For scrubber P024SC01, the permittee shall provide for cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling.

5. For scrubber P024SC01, the permittee shall follow the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans.

II. Operational Restrictions (continued)

6. The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the Operation and Maintenance Plan identified in A.II.1. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.

7. The scrubber water flow rate and recirculation water flow rate for scrubber P024SC01 shall be maintained at or above the minimum scrubber water flow rate and recirculation water flow rate established during the initial stack test which demonstrated the emission unit to be in compliance. The procedures specified in 40 CFR 63.1161(b) shall be followed to determine the minimum scrubber flow rates and the minimum recirculation flow rates.

Operation of wet scrubber P024SC01 with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in 40 CFR 63.1160(b)(2).

The permittee may reestablish compliant operating parameter values for the scrubber water flow rates and recirculation flow rates as part of any performance test that is conducted subsequent to the initial test or tests.

8. The HCl emissions from the pickle tank shall be vented to scrubber P024SC01.

The pressure drop across the scrubber P024SC01 shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.

9. The HCl emissions from the rinse tank shall be vented to scrubber P024SC02.

The pressure drop across the scrubber P024SC02 shall be continuously maintained at a value of not less than 1 inches of water at all times while the emissions unit is in operation.

10. The permittee shall provide and operate, except during loading and unloading of acid, a closed-vent system for each Hydrochloric acid storage vessel associated with this pickling line. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

11. The scrubber water flow rates and recirculation water flow rates for scrubber P024SC02 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test which demonstrated the emission unit to be in compliance.

The minimum scrubber water flow rates and recirculation water flow rates shall be determined based on the average flow rates recorded during the most recent stack test that demonstrated the emission unit to be in compliance. The scrubber water flow rate and recirculation water flow rate shall be recorded at fifteen-minute intervals during the stack test.

12. Should the rinse tank solution exceed a hydrochloric acid content of six percent by weight and a temperature of 100 degrees F., the rinse tank shall become subject to the requirements of 40 CFR Part 61 Subpart CCC.

13. The particulate emissions from the scale breaking operation shall be vented to baghouse P024BH01.

The pressure drop across baghouse P024BH01shall be maintained within the range of [XXXX1] inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a record of each inspection performed for scrubber P024SC01. Each inspection shall be signed by the responsible maintenance official and show the date of each inspection, any problem(s) identified, a description of repair(s), replacement(s), or other corrective action(s) taken, and the date of the repair(s), replacement(s), or other corrective action(s) taken. At a minimum the inspections conducted must comply with 40 CFR 63.1160(b)(2)(iv). The requirements of 40 CFR 63.1160(b)(2)(iv) are as follows:

Scrubber P024SC01 shall be inspected at intervals of no less than 3 months. Based on this inspection, the following actions are required when problems are noted:

a. cleaning or replacement of any plugged spray nozzles or other liquid adelivery devices;

b. repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

c. repair or replacement of droplet eliminator elements as needed;

d. repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

e. adjustment of damper settings for consistency with the required air flow.

2. The permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.

3. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P024SC01 while these emissions unit are in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

The permittee shall collect and record the following information:

a. the pressure drop across each scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber;

e. manufacturer certification that monitoring devices are accurate to within 5 percent; and

f. the date, the method used, and the results of the annual calibration requirements.

Failure to record each of the operating parameters listed in paragraph 40 CFR 63.1162(a)(2) is a violation of the monitoring requirements of 40 CFR Part 60, Subpart CCC.

4. The owner or operator of an affected hydrochloric acid storage vessel shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

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

5. As required by 40 CFR 63.10(b)(2) of subpart A, the owner or operator shall maintain records for 5 years from the date of each record of:

a. The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

b. The occurrence and duration of each malfunction of the air pollution control equipment;

c. All maintenance performed on the air pollution control equipment;

d. Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

e. All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan;

f. All required measurements needed to demonstrate compliance with 40 CFR Part 63, Subpart CCC, and to support the data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

g. All results of initial or subsequent performance tests;

h. All documentation supporting initial notifications and notifications of compliance status; and

i. Records of any applicability determination, including supporting analyses.

6. The permittee shall keep the written Operation and Maintenance Plan on record after it is developed to be made available for inspection, upon request, by the Hamilton County Department of Environmental Services for the life of the emissions unit or until the emissions unit is no longer subject to the provisions of 40 CFR Part 63, Subpart CCC. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Hamilton County Department of Environmental Services for a period of 5 years after each revision to the plan.

7. The permittee shall collect and record the following information on a monthly basis:

a. the name and identification of each rust preventative oil employed; and

b. the VOC content, as applied, excludig water and exempt solvents, in pounds per gallon, of each rust preventative oil employed.

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

8. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P024SC02 while these emissions unit are in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the pressure drop across each scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for each scrubber, in gallons per minute, on a once per shift basis; and

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber.

9. The permittee shall determine hydrochloric acid content, in percent by weight, and the temperature in degrees F. of the rinse tank solution on an annual basis.

10. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, 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 once per shift basis.

11. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 minimize or eliminate the 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.

IV. Reporting Requirements

1. The permittee shall submit an annual report identifying the dates the inspections required in A.III.1 and A.III.4 were conducted, a listing of any problems identified during the inspection, a listing of corrective actions taken to correct any problems identified, and the date the corrective actions was taken.

IV. Reporting Requirements (continued)

2. As required by 40 CFR 63.10(d)(5)(i), the permittee shall submit the following reports:

a. if actions taken by the permittee during a startup, shutdown, or malfunction of this emission unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner or operator shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; or

b. any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR 63.10(d)(5)(ii).

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels for scrubbers P024SC01 and P024SC02:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

Should any deviations occur, the corrective action taken to remedy the deviation, along with the date the corrective action taken shall be submitted.

4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a noncompliant rust preventative oil was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

5. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any annual record showing a rinse tank solution hydrochloric acid content greater than six percent by weight and a rinse tank temperature greater than 100 degrees F. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.

6. The permittee shall submit quarterly 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.

Should any deviations occur, the corrective action taken to remedy the deviation, along with the date the corrective action taken shall be submitted.

7. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

8. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive particulate emissions from this emissions unit were observed at the point of egress to the ambient air 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.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

Visible PE observations shall be made at egress points (i.e., doors closest to the scale breaking operation) of the building housing the scale breaking and coating operation.

1.b Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.c Compliance with the VOC content limitation specified in A.I.1 may be demonstrated by the information collected and recorded in A.III.7 of these terms and conditions.

The VOC content of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

1.d Compliance with the operational restrictions listed in A.II.7-A.II.9 shall be determined by the information collected and recorded in A.III.3.

1.e Emission Limitation:

Total particulate emissions from the wet scrubber outlets P024SC01 and P024SC02 and baghouse P024BH01 combined shall not exceed 65 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 or 26A and the procedures specified in OAC rule 3745-17-03(B)(10).

1.f Emission Limitation:

Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or

HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 26A.

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 2.5 years after the initial performance test which demonstrated compliance with the emission limitation specified in A.I.2.b. of this permit. The testing shall be conducted for scrubber P024SC01. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing. As required in 40 CFR 63.1162(a)(1) the maximum time period between testing shall be 2.5 years.

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation specified in A.I.2.b. of this permit.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

40 CFR Part 60, Appendix A, Methods 1-4 and Method 26(A).

In addition to the above mentioned methods, the permittee shall follow the procedures and methods specified in 40 CFR 63.1161(a) and (b), Performance Testing and Test Methods established to comply with 40 CFR Part 63 Subpart CCC.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. The testing shall be conducted for scrubbers P024SC01 and P024SC02, and baghouse P024BH01. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing;

ii. The emission testing shall be conducted at the outlet of the scrubbers P024SC01, P024SC02, and P024BH01 to demonstrate compliance with the allowable mass emission limitation for particulates from all stacks associated with the No. 4 pickling line of 65 lbs per hour. In addition to the pounds of particulate per hour emission rate from P024BH01, the grain per dry standard cubic foot emission rate shall be calculated to determine complinace with the 0.030 grains per dry standard cubic foot emission limit from the exhaust gases of the baghouse.

iii. A particulate emissions test also shall be conducted at the inlet of the scrubbers P024SC01 and P024SC02, and baghouse P024BH01 to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11; and

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and/or 26A of 40 CFR Part 60, Appendix A.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

1.i Compliance with the operational restrictions listed in A.II.11 shall be determined by the information collected and recorded in A.III.8.

1.j Compliance with the operational restrictions listed in A.II.12 shall be determined by the information collected and recorded in A.III.9.

1.k Emission Limitation:

0.030 grain/dry standard cubic foot from the exhaust gases from baghouse P024BH01

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.l Compliance with the operational restrictions listed in A.II.13 shall be determined by the information collected and recorded in A.III.10.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Wilp.Quench Tower (P043)

Activity Description: This is the quenching of hot coke operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Wilputte quench tower with baffles	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 49.6 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 49.6 pounds per hour is based upon a process weight rate of 84.5 tons per hour and Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply because the uncontrolled mass rate of emissions cannot be ascertained.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall inspect the baffle system on a weekly basis. The results of the weekly inspections shall be maintained in a log including the following information:

a. the date of the inspection;

b. the name of the inspector;

c. a description of the condition of the baffles; and

d. a description of corrective actions taken as a result of the inspection.

The permittee shall clean the baffle system on a monthly basis, and as needed, based on the weekly inspection. A record of each baffle cleaning shall also be maintained in a log, including the date and name of operator.

Written inspection and cleaning procedures shall be maintained on site and available for review during normal business hours.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. any week when an inspection of the baffle system was not performed;

b. any corrective actions initiated as a result of a weekly inspection; and

c. any month when the baffle system was not cleaned.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 49.6 pounds per hour.

Applicable Compliance Method:

Complicance shall be demonstrated by muliplying the particulate emission factor of 0.31 pound per ton of coal charged by the maximum hourly tons of coal charged. The particulate emission factor was obtained from section 1.4, Table 12.2-12 of the draft AP-42 document dated August 2001.

0.31 lbs PE/ton of coal charged X 67.14 tons of coal charged/hr = 20.8

Stack testing for particulate emissions from the quench tower is not possible.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: NMT/Desulf. Station (P047)

Activity Description: This is a combination hot metal pouring and desulfurization facility.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Hot metal pouring and desulfurization process with baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)(3)	See A.I.2.a below.
	OAC rule 3745-18-15(C)(10)	Sulfur dioxide emissions shall not exceed 0.40 pounds of sulfur dioxide per ton of product from the station. This emission unit shall not be operated when emissions unit P956 is in operation.

2. Additional Terms and Conditions

2.a The permittee shall use hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust from the hot metal pouring and desulfurization process. The control equipment associated with the hot metal pouring and desulfurization process shall meet the following requirements:

i. the collection efficiency shall be 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; and

ii. the control equipment achieves an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s) whichever is less stringent.

2.b Based on information provided in AP-42, Fifth Edition, Section 12.5.2.3, Emissions and Controls for hot metal desulfurization, and emission information provided by AK Steel, it is assumed that the potential to emit for sulfur dioxide emissions from this emission unit is well below the allowable emission rate; therefore, it is not necessary to establish monitoring, record keeping, and reporting requirements to ensure ongoing compliance. AP-42 list no SO2 emissions from the hot metal metal desulfurization processs, AK steel estimates 1.5 lbs/hr SO2, at maximum production levels this equates to an emission rate well below the allowable SO2 emission limit listed in section A.I.1 of this permit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a record of all times this emissions unit was in operation concurrently with emission unit P956.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions at the point of capture 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 minimize or eliminate the 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 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 notify the Hamilton County Department of Environmental Services in writing of any time periods emissions unit P956 and P047 were in operation at the same time. The notification shall include a listing of all times emission units P956 and P047 were in operaiton and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

3. 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.

4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible fugitive particulate emissions shall not exceed 20 percent opacity, as a three-minute average except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.b Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P047BH01 to demonstrate compliance with the allowable particulate emissions rate of 0.030 grains per dry standard cubic foot.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 of 40 CFR Part 60 Appendix A.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

V. Testing Requirements (continued)

1.d Emission Limitation:

0.030 grain/dry standard cubic foot from the exhaust gases from baghouse P047BH01

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.40 pounds of sulfur dioxide per ton of product from the station.

Applicable Compliance Method:

Based on information provided in AP 42, Fifth Edition, Section 12.5.2.3, Emissions and Controls for hot metal desulfurization, and emission information provided by AK Steel, it is assumed that the potential to emit for sulfur dioxide is well below the allowable emission rate. AP-42 list no SO2 emissions from the hot metal metal desulfurization processs. AK steel estimates 1.5 lbs/hr SO2. At maximum production levels this equates to an emission rate well below the allowable SO2 emission limit listed in section A.I.1 of this permit.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Terne Coat Line (P049)

Activity Description: The Terne Coat Line is a terne (92% lead, 8% tin) or terne-nickel coating of steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Terne Coating line consisting of caustic cleaning operation, pickling tank, pickling rinse tank, and plating tank vented to a wet scrubber The pickling operation associated with this emissions unit is for the removal of light rust or scale from the finished steel product of the metal surface prior to plating and coating. The pickling operation associated with this emissions unit is not for the chemical removal of iron oxide mill scale formed during hot rolling or hot forming. Therefore, 40 CFR Part 63, Subpart CCC does not apply.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the wet scrubber outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the wet scrubber outlet shall not exceed 44.6 pounds per hour. See A.I.2.b below.
Rust preventative oil application	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.a below.
	OAC rule 3745-21-09(OO)(2)	The VOC content of the rust preventative oil employed shall not exceed 1.1 pounds of VOC per gallon of oil, excluding water and exempt solvents.

2. Additional Terms and Conditions

2.a The permittee shall employ the rust preventative oil in such a manner as to minimize fugitive PE.

2.b The particulate emissions limitation of 44.6 pounds per hour is based upon a process weight rate of 50 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 44.6 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

1. The scrubber water flow rates and recirculation water flow rates for scrubber P049SC01 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test that demonstrated the emissions unit is in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P049SC01 while this emissions unit are in operation. The permittee shall collect and record the following information:

a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for the scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for the scrubber, in gallons per minute, on a once per shift basis;

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber;

2. The permittee shall collect and record the following information on a monthly basis:

a. the name and identification of each rust preventative oil employed; and

b. the VOC content, as applied, excluding water and exempt solvents, in pounds per gallon, of each rust preventative oil employed.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions. 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 minimize or eliminate the 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following parameters were not maintained at or above the required levels for scrubber P049SC01:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a noncompliant rust preventative oil was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.b Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.c Compliance with the VOC content limitation specified in A.I.1 may be demonstrated by the information collected and recorded in A.III.2 of these terms and conditions.

The VOC contents of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

V. Testing Requirements (continued)

1.d Emission Limitation:

Total particulate emissions from the outlet of wet scrubber P049SC01 shall not exceed 44.6 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 or 26A and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of the scrubber P049SC01 and the outlet of all uncontrolled stacks to demonstrate compliance with the allowable mass emission limitation for particulates of 44.6 lbs per hour.

iii. A particulate emissions test also shall be conducted at the inlet of scrubber P049SC01 to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and/or 26A of 40 CFR Part 60, Appendix A.

v. The pressure drop accross the scrubber shall be recorded every five minutes during the stack test.

vi. The scrubber water flow rate and recirculation water flow rate shall be recorded every fifteen minutes during the stack test.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 EG Line (P062)

Activity Description: This is an electrolytic zinc coating or zinc-nickel coating of steel coils operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Electrogalvanizing line consisting of a precleaning station (uncontrolled), a caustic degreasing station (uncontrolled), a surface preperation tank, an electro galvanizing tank, and dissolving station. The surface preperation tank, electro-galvanizing tank, and dissolving station are vented to two packed bed scrubbers in parallel.	OAC rule 3745-31-05(A)(3) (PTI 14-3806)	The total particulate emissions (PE) from the exhaust gases exiting the stacks associated with scrubber P062SC01, scrubber P062SC02, the caustic degreasing station, and the precleaning station, combined, shall not exceed the following: 5.36 lbs PE/hr; and 4.22 lbs PM10/hr. The requirements of this rule also include compliance with OAC rule 3745-17-07(A) and OAC rule 3745-17-07(B).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the any stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.b below.
	OAC rule 3745-17-11	The emission limitation specified in OAC rule 3745-17-11 is less stringent than that established in PTI 14-3806. See A.I.2.a.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Rust preventative oil application	OAC rule 3745-21-09(OO)(2)	The VOC content of the rust preventative oil employed shall not exceed 1.1 pounds of VOC per gallon of oil, excluding water and exempt solvents.

2. Additional Terms and Conditions

2.a The emission limitation established in PTI 14-3806 for the total PE exiting the stacks associated with this emission unit is 5.36 lbs/hr.

The particulate emission limitation from Figure II of OAC rule 3745-17-11, based on an uncontrolled particulate emission rate of 49.6 lbs/hr is 7.19 lbs/hr which is less stringent than that established in PTI 14-3806.

The particulate emission limitation from Table I of OAC rule 3745-17-11, based on a maximum process weight of 290 TPH is 62.6 lbs/rr which is also less stringent than that established in PTI 14-3806.

2.b The permittee shall operate this emissions unit in such a manner as to minimize fugitive PE.

II. Operational Restrictions

1. The scrubber water flow rates and recirculation water flow rates for scrubbers P062SC01 and P062SC02 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test which demonstrated the emissions unit to be in compliance.

2. The emissions from the surface preparation tank, electrogalvanizing tank, and dissolving station shall be vented to scrubbers P062SC01 and P062SC02 in parallel.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubbers P062SC01 and P062SC02 while these emissions unit are in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the pressure drop across each scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for each scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for each scrubber, in gallons per minute, on a once per shift basis; and

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber.

2. The permittee shall collect and record the following information on a monthly basis:

a. the name and identification of each rust preventative oil employed; and

b. the VOC content, as applied, excluding water and exempt solvents, in pounds per gallon, of each rust preventative oil employed.

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

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions. 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 minimize or eliminate the 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels for scrubbers P062SC01 and P062SC02:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

Should any deviations occur, the corrective action taken to remedy the deviation, along with the date the corrective action taken shall be submitted.

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a non-compliant rust preventative oil was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.c Compliance with the VOC content limitation specified in A.I.1 shall be demonstrated by the information collected and recorded in A.III.2 of these terms and conditions.

The VOC content of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

1.d Emission Limitation:

The total particulate emissions (PE) from the exhaust gases exiting the stacks associated with scrubber P062SC01, scrubber P062SC02, the caustic degreasing station, and the precleaning station, combined, shall not exceed the following:

5.36 lbs PE/hr; and
4.22 lbs PM10/hr.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5, the procedures specified in OAC rule 3745-17-03(B)(10,) and previous stack testing performed at AK steel for the precleaning station and caustic degreasing station. The particulate emission rate of 0.08 lbs/hr from the precleaning and caustic degreasing station as determined during the December 16, 1991 stack test, shall be added to the particulate emission rate determined by the testing requirements specified in A.V.1.g. to determine the total particulate emission rate.

Should additional testing be required to determine the particulate emission rate from the stacks associated with the precleaning and caustic degreasing stations stack, the testing shall be conducted in accordance with the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of scrubbers P062SC01 and P062SC02 to demonstrate compliance with the allowable mass emission limitation for particulates of 5.32 lbs per hour; (see A.V.1.g for additional information).

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and of 40 CFR Part 60, Appendix A.

iv. The pressure drop accross the scrubber shall be recorded every five minutes during the stack test.

v. The scrubber water flow rate and recirculation water flow rate shall be recorded every fifteen minutes during the stack test.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Cold Mill (P065)

Activity Description: The United 5 Stand Tandem Cold Mill is a cold rolling steel operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Cold mill equipped with settling chamber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the any stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Section A.I.2.b below.
	OAC rule 3745-17-11	Particulate emissions from all stacks associated with this emisisons unit shall not exceed 74.9 pounds per hour. See A.I.2.a below.
Rolling Oil Application	OAC rule 3745-21-09(OO)(1)	The VOC content of the rolling oil employed shall not exceed 2.9 pounds of VOC per gallon of oil, excluding water and exempt solvents.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 74.9 pounds per hour is based upon a process weight rate of 585 tons per hour and Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply because the uncontrolled mass rate of emissions cannot be ascertained.

2.b When cold rolling of strip steel steel is occuring the permittee shall vent fugitive emissions to the settling chamber to minimize fugitive dust emissions.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions. 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 minimize or eliminate the 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 collect and record the following information on a monthly basis:

a. the name and identification of each rolling oil employed; and

b. the VOC content, as applied, excluding water and exempt solvents, in pounds per gallon, of each rolling oil employed.

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.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

3. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a noncompliant rolling oil was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.c Compliance with the VOC content limitation specified in A.I.1 may be demonstrated by the information collected and recorded in A.III.3 of these terms and conditions.

The VOC contents of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

1.d Emission Limitation:

PE emissions from the stack associated with this emissions unit shall not exceed 74.9 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of the stack associated with the settling chamber to demonstrate compliance with the allowable mass emission limitation for particulates.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and of 40 CFR Part 60, Appendix A.

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 Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Gas Holder/Flare (P067)

Activity Description: The gas holder/flare is used to flare excess coke oven gas.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Coke oven gas holder vessel with flare	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(J)(2)	The combustion of coke oven gas associated with this emissions unit shall be performed only through the use of smokeless flare equipment.
	OAC rule 3745-18-15(C)(8)	The hydrogen sulfide content of coke oven gas vented to the flare shall not exceed two hundred eighty grains of hydrogen sulfide per one hundred dry standard cubic feet of coke oven gas.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner.

2. The permittee shall operate the flare in a smokeless manner i.e., there shall be no visible emissions from the flare for more than 5 minutes during any 2 consecutive hours.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the flare. The visible emission observations shall be conducted in accordance with 40 CFR, Appendix A, Method 22 and shall be at least 30 minutes in duration. The results of the Method 22 visible emission observations shall recorded. 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.

If the permittee observes visible emissions from the flare, the permittee shall monitor the visible emissions for a minimum of 30 minutes in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and record the results in an operations log.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the presence of a pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall record all periods during which the pilot flame was not present.

3. The permittee shall take grab samples of the coke oven gas delivered to this vessel, for analysis of the hydrogen sulfide content. A minimum of one sample shall be taken each day on Monday through Friday of each week, except for any days when no gas is delivered to the vessel. The hydrogen sulfide content of each of the samples shall be determined using the "Tutwiler Method," and the resulting hydrogen sulfide content shall be expressed in terms of grains of hydrogen sulfide per 100 dry standard cubic feet of coke oven gas.

4. On a monthly basis, the permittee shall calculate the average sulfur content of the coke oven gas vented to the flare in grains per 100 dscf. This shall be calculated by averaging the results of all the daily samples collected during the month.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit (b) include the results of the Method 22 visible emission observations and (c) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the pilot flame was not functioning.

3. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing an exceedance of the coke oven gas sulfur content limit specified in A.I.1 of these terms and conditions. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.

4. The permittee shall submit quarterly reports which include all visible emission readings conducted pursuant to the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 as a result of the presence of visible emissions from the flare. These quarterly reports shall be be submitted by January 31, April 30, July 31 and October 31 of each year and shall address the data obtained during the previous calendar quarter.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

The hydrogen sulfide content of coke oven gas vented to the flare shall not exceed two hundred eighty grains of hydrogen sulfide per one hundred dry standard cubic feet of coke oven gas, based on a monthly average of gas samples taken.

Applicable Compliance Method:

Compliance may be demonstrated by the information collected and recorded in A.III.3. and A.III.4.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Wilp. Exhausters (P068)

Activity Description: The two Wilputte exhausters for the coke oven gas distribution throughout the by-products facility

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Two coke oven exhausters (gas distribution system throughout the by-products facility)	40 CFR Part 61, Subpart L	Benzene emissions equal to or in excess of 10,000 ppm from an exhauster shall constitute a leak as defined in Subpart L. Upon detection of a leak, the permittee shall initiate the control measures/repair procedures in A.I.2. below.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Each exhauster shall be monitored quarterly to detect leaks by the methods outlined in 40 CFR 61.245(b), Subpart V.

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

2. The permittee shall record the following, pursuant to 40 CFR 61.246 Subpart V, when a leak is detected:

a. the instrument and the operator identification number or name and the exhauster identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. the repair method applied in each attempt to repair the leak;

d. any maximum instrument reading that is equal to or greater than 10,000 ppm of benzene, taken after each repair attempt;

e. reason(s) for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the owner or operator (or designee) whose decision it was that a repair could not be effected without a process shutdown;

g. the expected date of the successful repair of the leak, if a leak is not repaired within 15 calendar days; and

h. the date of the successful repair of the leak.

3. Upon the detection of a benzene leak from an exhauster, the permittee shall inititate the following procedures:

a. when a leak is detected a weatherproof and readily visible identification (tag) marked with the exhauster identification number shall be attached to the leaking exhauster. The tag may be removed after the leak has been repaired; and

b. when a leak is detected it shall be repaired as soon as practicable but no later than 15 calendar days. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

4. Each exhauster shall be marked in a manner that it can be distinguished readily from other pieces of equipment in benzene service.

IV. Reporting Requirements

1. The permittee shall submit semi-annual reports which include the following information from the quarterly monitoring of each exhauster requird in A.III.2. of these terms and conditions:

a. the number of exhausters that were detected leaking;

b. the number of exhauster for which leaks were repaired;

c. a statement signed by the owner or operator stating whether all provisions of 40 CFR 61, Subpart L have been fulfilled during the reporting period.

The permittee shall submit such reports on a semi-annual basis to the Hamilton County Department of Environmental Services. The permittee shall submit the reports by February 15 and August 15 of each year and shall cover the previous six calendar months (July through December and January through June, respectively).

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 Compliance with the leak monitoring and repair provisions specified in A.I.1 and A.I.2.a shall be demonstrated by the information collected and recorded in A.III.1 and A.III.2 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FC, WO Tanks & Dec (P070)

Activity Description: This includes the final cooler, wash oil tanks and decanter within the by-products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
by-products light oil recovery with gas blanketing	40 CFR Part 61, Subpart L	No detectible fugitive VOC emissions from equipment in benzene service
	40 CFR Part 61, Subpart V	Leak detection and repair program for fugitive VOC emissions from equipment in benzene service
	OAC rule 3745-21-09(DD)	The emission limitations specified in OAC rule 3745-21-09(DD) are the same as or less stringent than those specified in 40 CFR Part 61, Subpart V.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the by-products recovery plant in accordance with the requirements of 40 CFR 61.132.

1.a The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

II. Operational Restrictions (continued)

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

2.a The permittee shall enclose and seal the liquid surface of the light oil sump to form a closed system to contain the emissions.

i. Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

ii. Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

iii. The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

2.b The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

3. Equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

4. Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

5. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6. The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; or

c. be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

II. Operational Restrictions (continued)

7. The permittee shall equip each open ended valve or line with a cap, blind flange, plug or second valve. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

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

When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 61.242-6(a) at all other times.

8. Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

III. Monitoring and/or Record Keeping Requirements

1. Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

3. Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

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

4. Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6.a Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

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

6.c Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

6.d When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

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

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

6.f Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

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

6.g Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

i. the permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

6.h Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

i. the permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;

ii. the process unit within which the valve is located is an existing process unit; and

iii. the permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

7. Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

8. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.

Delay of repair for valves will be allowed if:

a. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

b. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

Delay of repair for pumps will be allowed if:

a. repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

b. repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

9. Closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

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

9.a Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

9.b Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760C.

9.c Flares used to comply with 40 CFR Part 61 Subpart V shall comply with the requirements of 40 CFR 60.11.

9.d Control devices that are used to comply with the provisions of 40 CFR Part 61 Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

9.e Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

10. Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

a. Monitoring shall comply with Method 21 of Appendix A of 40 CFR Part 60.

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

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

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

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

11. To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

11.a Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

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

11.b The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

11.c Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

12. The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

b. the dates and descriptions of any changes in the design specifications

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

13. The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

14. The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

15. When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

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

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

16. When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

17. The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

18. The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve; and

b. a list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

19. The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

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

20. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

21. Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

22. For bypass lines that could divert a vent stream away from a control device required by the terms and conditions of this permit, the permittee shall comply with a or b below. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this monitoring.

a. Properly maintain and operate a flow indicator and recorder that takes a reading at least once every 15 minutes. The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. The following information shall be recorded in a log:

i. hourly records of whether the flow indicator was operating and whether diversion was detected at any time during each hour; and

ii. records of times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating.

b. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. The following information shall be recorded in a log:

i. records that monthly inspections were performed; and

ii. records of all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

IV. Reporting Requirements

1. A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in a through e below.

a. for sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133:

i. a brief description of any visible defect in the source or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

2. The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Wilp. Tar & FL Vess. (P075)

Activity Description: This includes the Wilputte tar and flushing liquor processing vessels within the by-products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
by-products tar recovery with gas blanketing	40 CFR Part 61, Subpart L	No detectible fugitive VOC emissions from equipment in benzene service
	40 CFR Part 61, Subpart V	Leak detection and repair program for fugitive VOC emissions from equipment in benzene service

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the by-products recovery plant in accordance with the requirements of 40 CFR 61.132.

1.a The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

II. Operational Restrictions (continued)

2. Equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

3. Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

4. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

5. The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; or

c. be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

6. The permittee shall equip each open ended valve or line with a cap, blind flange, plug or second valve. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

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

When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 61.242-6(a) at all other times.

7. Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

III. Monitoring and/or Record Keeping Requirements

1. Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

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

2. Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

3. Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

4. Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6.a Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

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

6.c Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

6.d When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

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

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

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

6.f Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

6.g Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

i. the permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

6.h Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

i. the permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;

ii. the process unit within which the valve is located is an existing process unit; and

iii. the permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

7. Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

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

8. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.

Delay of repair for valves will be allowed if:

a. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

b. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

Delay of repair for pumps will be allowed if:

a. repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

b. repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

9. Closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

9.a Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

9.b Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760C.

9.c Flares used to comply with 40 CFR Part 61 Subpart V shall comply with the requirements of 40 CFR 60.18.

9.d The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61 Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

9.e Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

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

10. Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

a. Monitoring shall comply with Method 21 of Appendix A of 40 CFR Part 60.

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

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

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

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

11. To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

11.a Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

11.b The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

11.c Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

12. The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

b. the dates and descriptions of any changes in the design specifications

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

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

13. The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

14. The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

15. When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

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

16. When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

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

17. The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

18. The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve; and

b. a list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

19. The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

20. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

21. Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

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

22. For bypass lines that could divert a vent stream away from a control device required by the terms and conditions of this permit, the permittee shall comply with a or b below. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this monitoring.

a. Properly maintain and operate a flow indicator and recorder that takes a reading at least once every 15 minutes. The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. The following information shall be recorded in a log:

i. hourly records of whether the flow indicator was operating and whether diversion was detected at any time during each hour; and

ii. records of times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating.

b. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. The following information shall be recorded in a log:

i. records that monthly inspections were performed; and

ii. records of all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

IV. Reporting Requirements

1. A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in a through e below.

a. for sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133:

i. a brief description of any visible defect in the source or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

IV. Reporting Requirements (continued)

2. The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual 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:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: EP Roll Shop SB1 (P087)

Activity Description: Rolls are blasted and polished at this operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Iron shot blaster equipped with fabric filter baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from exhaust gases from the baghouse shall not exceed 41.9 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 41.9 pounds per hour is based upon a process weight rate of 37.4 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 41.9 lbs/hour, the permittee shall comply with the more stringent limitation. As specified in OAC rule 3745-17-11(A)(3), the uncontrolled mass emission rates for P087, P088, and P089 shall be used for determining the maximum allowable particulate emission rate.

II. Operational Restrictions

1. All particulate emissions from the steel shot blasting shall be vented to baghouse P087BH01.

The pressure drop across baghouse P087BH01shall be maintained within the range established during the most recent stack test that demonstrated compliance while this emission unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, 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 once per shift basis.

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

2. 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly 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 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.

3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions from the exhaust gases from the baghouse shall not exceed 41.9 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 3 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P087BH01 to demonstrate compliance with the allowable mass emission limitation for particulates from the steel shot blasting line and for compliance with the visible particulate emission limitation.

iii. A particulate emissions test also shall be conducted at the inlet of baghouse P087BH01 to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A.

v. During each mass emission test run, the following test method(s) shall be employed to demonstrate compliance with the allowable visible particulate emission limit: Methods 9 of 40 CFR Part 60 Appendix A.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: EP Roll Shop SB2 (P088)

Activity Description: Rolls are blasted and polished at this operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Iron shot blaster equipped with fabric filter baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from exhaust gases from the baghouse shall not exceed 41.9 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 41.9 pounds per hour is based upon a process weight rate of 37.4 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 41.9 lbs/hour, the permittee shall comply with the more stringent limitation. As specified in OAC rule 3745-17-11(A)(3), the uncontrolled mass emission rates for P087, P088, and P089 shall be used for determining the maximum allowable particulate emission rate.

II. Operational Restrictions

1. All particulate emissions from the steel shot blasting shall be vented to baghouse P088BH01.

The pressure drop across baghouse P088BH01shall be maintained within the range established during the most recent stack test that demonstrated compliance while this emission unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, 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 once per shift basis.

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

2. 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly 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 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.

3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions from the exhaust gases from the baghouse shall not exceed 41.9 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 3 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P088BH01 to demonstrate compliance with the allowable mass emission limitation for particulates from the steel shot blasting line and for compliance with the visible particulate emission limitation.

iii. A particulate emissions test also shall be conducted at the inlet of baghouse P088BH01 to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A.

v. During each mass emission test run, the following test method(s) shall be employed to demonstrate compliance with the allowable visible particulate emission limit: Methods 9 of 40 CFR Part 60 Appendix A.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CSM Roll Shop SB (P089)

Activity Description: Rolls are blasted and polished at this operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Iron shot blaster equipped with fabric filter baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from exhaust gases from the baghouse shall not exceed 41.9 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 41.9 pounds per hour is based upon a process weight rate of 37.4 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 41.9 lbs/hour, the permittee shall comply with the more stringent limitation. As specified in OAC rule 3745-17-11(A)(3), the uncontrolled mass emission rates for P087, P088, and P089 shall be used for determining the maximum allowable particulate emission rate.

II. Operational Restrictions

1. All particulate emissions from the steel shot blasting shall be vented to baghouse P089BH01.

The pressure drop across baghouse P089BH01shall be maintained within the range established during the most recent stack test that demonstrated compliance while this emission unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, 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 once per shift basis.

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

2. 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly 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 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.

3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions from the exhaust gases from the baghouse shall not exceed 41.9 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 3 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P089BH01 to demonstrate compliance with the allowable mass emission limitation for particulates from the steel shot blasting line and for compliance with the visible particulate emission limitation.

iii. A particulate emissions test also shall be conducted at the inlet of baghouse P089BH01 to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A.

v. During each mass emission test run, the following test method(s) shall be employed to demonstrate compliance with the allowable visible particulate emission limit: Methods 9 of 40 CFR Part 60 Appendix A.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Flux Handling (P901)

Activity Description: This includes the unloading and conveying of flux material to the BOF.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Rail car unloading of flux	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a below.
Truck unloading of flux	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
Conveyor and transfer points equipped with a baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)(3)	See A.I.2.c below
	OAC rule 3745-17-11	Particulate emissions from the exhaust gases exiting the baghouse shall not exceed 63 lbs/hr. See A.I.2.d below.

2. Additional Terms and Conditions

2.a Reasonable available control measures for the rail car unloading is the use of bottom unloading.

2.b Reasonable available control measures for the truck dumping area is the maintenance of a two-sided building with a roof to enclose the truck dumping area.

2.c The permittee shall use hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust from the transfer and conveying operation. The control equipment associated with the transfer and conveying operation shall have 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.d The particulate emissions limitation of 63.0 pounds per hour is based upon a process weight rate of 300 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 63.0 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range established either during the most recent emissions test that demonstrated the emissions unit to be in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, 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 when in operation.

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions. 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 minimize or eliminate the 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly 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 permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

V. Testing Requirements (continued)

1.c Emission Limitation:

Particulate emissions from baghouse exhaust gases shall not exceed 63 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of the bahouse P901BH01 to demonstrate compliance with the allowable mass emission limitation for particulates and for compliance with the visible particulate emission limitation.

iii. A particulate emissions test also shall be conducted at the inlet of baghouse P901BH01 to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

v. During each mass emission test run, the following test method(s) shall be employed to demonstrate compliance with the allowable visible particulate emission limit: Methods 9 of 40 CFR Part 60 Appendix A.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Continuous Caster (P902)

Activity Description: Molten steel is continuous cast into steel slabs at this operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
BOF continuous casting hot metal transfer to tundish	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Maintain good operating practices for the hot metal transfer to the tundish at the inlet of the caster, in order to minimize or eliminate visible particulate emissions of fugitive dust.
BOF continuous casting - casting machine	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	Particulate emissions from all stacks associated with this emission unit shall not exceed 73.0 pounds per hour. See A.I.2.a below.
BOF continuous casting - torch cutting operation	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	Maintain good operating practices for torch cutting operation, in order to minimize or eliminate visible particulate emissions of fugitive dust.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 73.0 pounds per hour is based upon a process weight rate of 700 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 73.0 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 daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks 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 shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions. 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 minimize or eliminate the 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.

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.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.c Emission Limitation:

Particulate emissions from baghouse exhaust gases shall not exceed 73 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 3 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlets of all stacks associated with this emission unit to demonstrate compliance with the allowable mass emission limitation for particulates and for compliance with the visible particulate emission limitation.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

iv. During each mass emission test run, the following test method(s) shall be employed to demonstrate compliance with the allowable visible particulate emission limit: Methods 9 of 40 CFR Part 60 Appendix A.

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 Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Blast Furnace (P925)

Activity Description: Arthur G. McKee unique blast furnace produces hot metal.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
740 tons/hr blast furnace with settling chamber and venturi scrubber (stove stack emissions)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 73.76 pounds per hour. See A.I.2.a below.
Blast furnace charging and dry flue dust handling from the settling chamber; emergency pressure relief	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The permittee shall minimize or eliminate visible emisions of fugitive dust through the employment of RACM. These measures shall include, but not be limited to the use of water sprays or steam injection into the dry flue dust when discharged from the settling chamber into a railcar.
Blast furnace tapping (East and West casthouse fugitive emissions) with flame suppression system	OAC rule 3745-17-07(B)(3)	Visible particulate emissions of fugitive dust from blast furnace casthouses shall not exceed twenty percent opacity, as a six-minute average.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-08(B)	The permittee shall minimize or eliminate visible emisions of fugitive dust through the employment of RACM. See A.I.2.b below.
Blast furnace waste gas disposal	OAC rule 3745-21-09(J)(2)	No person shall emit organic materials into the atmosphere from waste gas flare system unless such materials are burned by smokeless flares, or an equally effective control equipment as approved by the director.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 73.76 pounds per hour is based upon an a maximum process weight of 740 TPH and Table I of OAC rule 3745-17-11 This emission limitation is more stringent than that obtained from applying the uncontrolled particulate emission rate of 15,000 lbs/hr and Figure II of OAC rule 3745-17-11.

2.b The permittee shall operate and maintain a flame suppression control system to reduce fugitive emissions from the casthouse associated with this emission unit.

The technical specifications of the flame suppression system shall be in accordance with AK Steel's Flame Suppression System Design Drawing Nos. 591580-86.

The flame suppression control system shall be designed and operated to limit visible fugitive emissions from the roof monitors and other openings of the casthouse, and shall utilize natural gas as its primary fuel.

The permittee shall keep the runner covers in place except when such covers are undergoing maintenance.

2.c This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart FFFF, "National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities." These requirements are specified in Attachment B of this permit.

2.d On October 17, 2001, final Findings and Orders were issued to the permittee by the Director of the Ohio EPA. In those Findings and Orders, the Director found probable cause that the particulate emissions from emissions units P925, P926, and P927 are and have been causing a public nuisance, in violation of OAC rule 3745-15-07. As a result of that finding, the Director revoked the exemptions contained in OAC rule 3745-17-08 for these emissions units and required the permittee to submit a control plan and schedule for achieving compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B). The permittee failed to submit an acceptable control plan and schedule, and the particulate emissions from these emissions units continue to cause a public nuisance.

Emissions units P925, P926, and P927 are subject to the USEPA's new MACT requirements in 40 CFR Part 63, Subpart FFFF. Compliance with these requirements should result in compliance with OAC rules 3745-17-07(B) and 3745-17-08(B) and should abate the existing public nuisance.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner.

II. Operational Restrictions (continued)

2. The scrubber water flow rates and recirculation water flow rates for scrubber P925SC01 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test which demonstrated the emission unit to be in compliance.

The minimum scrubber water flow rates and recirculation water flow rates shall be determined based on the average flow rates recorded during the most recent stack test that demonstrated the emission unit to be in compliance.

3. The pressure drop across the scrubber P925SC01 shall be ontinuously maintained within the the range of 50-80 inches of water at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P925SC01 while the emissions unit is in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for the scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for the scrubber, in gallons per minute, on a once per shift basis; and

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the presence of a pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

a. all periods during which the pilot flame was not present; and

b. the operating times for the flare, monitoring equipment, and the associated emissions unit.

3. The flame suppression control system shall be equipped with gas monitoring and recording equipment to assure that, when operational, the system is operating at design levels to assure maximum reduction of fugitive emissions from the casthouse.

Gas flow records, in the form of recording charts, shall identify the following:

a. the time of day; and

b. the gas flow rate.

In addition, the permittee shall maintain records of the start and end times of each tapping operation and of each use of the flame suppression control system.

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

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points venting to the ambient air (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 minimize or eliminate the 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels for scrubber P925SC01:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

Should any deviations occur, the corrective action taken to remedy the deviation, along with the date the corrective action taken shall be submitted.

2. The permittee shall submit deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any gas flow record required in A.III.3. was not kept and identify all periods of time the flame suppression system was not operated in an optimal manner. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.

5. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a 3-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.c Compliance with the control requirements for the flame suppression system which control the Blast Furnace Tapping (East and West Casthouse Fugitive Emissions) shall be demonstrated by the recordkeeping requirements in section A.III.3. of these terms and conditions.

1.d Emission Limitation:

Particulate emissions from the exhaust gases from the scrubber shall not exceed 73.76 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P925SC01 to demonstrate compliance with the allowable mass emission limitation for particulates from the venturi scrubber of 73.76 lbs per hour.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 of 40 CFR Part 60 Appendix A.

iv. The scrubber water flow rate and recirculation water flow rate shall be recorded at fifteen-minute intervals during the stack test.

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 Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 15 Vessel (P926)

Activity Description: The No. 15 basic oxygen furnace produces molten steel.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Basic oxygen furnace, hot metal charging to vessel with open hood, 240,000 acfm high draft fan vented to a venturi scrubber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.
Basic oxygen furnace steel refining (oxygen lancing/melting) with closed hood, 240,000 acfm high draft fan vented to a venturi scrubber and flare	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.
Basic oxygen furnace tapping with open hood, and 240,000 acfm high draft fan vented to a venturi scrubber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.
Basic oxygen furnace slagging off process, 240,000 acfm high draft fan vented to a venturi scrubber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 69.19 pounds per hour is based upon an a maximum process weight of 510 TPH and Table I of OAC rule 3745-17-11. This emission limitation is more stringent than that obtained from applying the uncontrolled particulate emission rate of 29070 lbs/hr and Figure II of OAC rule 3745-17-11. The allowable particulate emissions using Figure II is 141.36 lbs/hr. The uncontrolled mass rate of emission was calculated using the maximum process weight rate of 1020 (the combined maximum process weights for P026 and P027 combined per OAC rule 3745-17-11(A)(3)) tons per hour provided in the permit application and an emission factor of 28.5 pounds per ton for uncontrolled basic oxygen furnace (BOF) particulate emissions from AP-42, Table 12.5-1 (10/86).

2.b The permittee shall minimize or eliminate visible emisions of fugitive dust through the employment of RACM. These measures shall include, but not be limited to the following:

i. Hot metal charging of the vessel shall be done with the vessel tilted no more than 40 degrees from the vertical postion. Hot Metal charging shall be conducted with the full draft on the primary exhaust system.

ii. Scrap inspection and segregation procedures shall occur to assure that excessively oily scrap will be excluded from charging to the vessels. No turnings or borings shall be charged to the vessel.

iii. Scrap graded as No. 2 Bundles that are charged to the vessel shall not exceed five percent of the metallic charge average on a weekly basis.

iv. Oxygen lancing sequencing with hood skirt position shall be optimized for minimizing emissions at the beginning of the oxygen blows.

v. Furnace tapping shall be conducted with full draft on the primary exhaust system.

These control measures are based on requirements contained in the Consent Decree entered into by AK Steel and USEPA; Case No. 1-79-146.

2.c This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart FFFF, "National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities." These requirements are specified in Attachment B of this permit.

2.d On October 17, 2001, final Findings and Orders were issued to the permittee by the Director of the Ohio EPA. In those Findings and Orders, the Director found probable cause that the particulate emissions from emissions units P925, P926, and P927 are and have been causing a public nuisance, in violation of OAC rule 3745-15-07. As a result of that finding, the Director revoked the exemptions contained in OAC rule 3745-17-08 for these emissions units and required the permittee to submit a control plan and schedule for achieving compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B). The permittee failed to submit an acceptable control plan and schedule, and the particulate emissions from these emissions units continue to cause a public nuisance.

Emissions units P925, P926, and P927 are subject to the USEPA's new MACT requirements in 40 CFR Part 63, Subpart FFFF. Compliance with these requirements should result in compliance with OAC rules 3745-17-07(B) and 3745-17-08(B) and should abate the existing public nuisance.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner while oxygen lancing is occuring.

II. Operational Restrictions (continued)

2. The scrubber water flow rates and recirculation water flow rates for scrubber P926SC01 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test which demonstrated the emission unit to be in compliance.

The minimum scrubber water flow rates and recirculation water flow rates shall be determined based on the average flow rates recorded during the most recent stack test that demonstrated the emission unit to be in compliance.

3. The pressure drop across the scrubber P926SC01 shall be continuously maintained within the the range of 45-50 inches of water at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P926SC01 while the emissions unit is in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for the scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for the scrubber, in gallons per minute, on a once per shift basis; and

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the presence of a pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

a. all periods during which the pilot flame was not present during the oxygen lancing process; and

b. the operating times for the flare, monitoring equipment, and the associated emissions unit.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points venting to the ambient air (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 minimize or eliminate the 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.

4. The permitte shall collect and record the following information on a weekly basis:

a. the total amount of No.2 Bundles charged to the vessel, recorded in tons;

b. the total metallic charge to the vessel, recorded in tons; and

c. the percentance of No.2 Bundles charged to the vessel (the amount recored in line a. divided by the amount recorded in line b. multiplied by 100)

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels for scrubber P926SC01:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

Should any deviations occur, the corrective action taken to remedy the deviation, along with the date the corrective action taken shall be submitted.

2. The permittee shall submit deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

4. The permittee shall submit deviation (excursion) reports that identify each week the percentage of No. 2 Bundles exceed five percent of the total metallic charge.

5. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a 3-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.c Emission Limitation:

Particulate emissions from the exhaust gases from the scrubber shall not exceed 69.19 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P926SC01 to demonstrate compliance with the allowable mass emission limitation for particulates.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 of 40 CFR Part 60 Appendix A.

iv. The scrubber water flow rate and recirculation water flow rate shall be recorded at fifteen-minute intervals during the stack test.

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 Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 16 Vessel (P927)

Activity Description: The No. 16 basic oxygen furnace produces molten steel.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Basic oxygen furnace, hot metal charging to vessel with open hood, 240,000 acfm high draft fan vented to a venturi scrubber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.
Basic oxygen furnace steel refining (oxygen lancing/melting) with closed hood, 240,000 acfm high draft fan vented to a venturi scrubber and flare	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.
Basic oxygen furnace tapping with open hood, and 240,000 acfm high draft fan vented to a venturi scrubber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.
Basic oxygen furnace slagging off process, 240,000 acfm high draft fan vented to a venturi scrubber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust emissions associated with this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.b below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-11(B)	Particulate emissions from exhaust gases from the venturi scrubber shall not exceed 69.19 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 69.19 pounds per hour is based upon an a maximum process weight of 510 TPH and Table I of OAC rule 3745-17-11. This emission limitation is more stringent than that obtained from applying the uncontrolled particulate emission rate of 29070 lbs/hr and Figure II of OAC rule 3745-17-11. The allowable particulate emissions using Figure II is 141.36 lbs/hr. The uncontrolled mass rate of emission was calculated using the maximum process weight rate of 1020 (the combined maximum process weights for P026 and P027 combined per OAC rule 3745-17-11(A)(3)) tons per hour provided in the permit application and an emission factor of 28.5 pounds per ton for uncontrolled basic oxygen furnace (BOF) particulate emissions from AP-42, Table 12.5-1 (10/86).

2.b The permittee shall minimize or eliminate visible emisions of fugitive dust through the employment of RACM. These measures shall include, but not be limited to the following:

i. Hot metal charging of the vessel shall be done with the vessel tilted no more than 40 degrees from the vertical postion. Hot Metal charging shall be conducted with the full draft on the primary exhaust system.

ii. Scrap inspection and segregation procedures shall occur to assure that excessively oily scrap will be excluded from charging to the vessels. No turnings or borings shall be charged to the vessel.

iii. Scrap graded as No. 2 Bundles that are charged to the vessel shall not exceed five percent of the metallic charge average on a weekly basis.

iv. Oxygen lancing sequencing with hood skirt position shall be optimized for minimizing emissions at the beginning of the oxygen blows.

v. Furnace tapping shall be conducted with full draft on the primary exhaust system.

These control measures are based on requirements contained in the Consent Decree entered into by AK Steel and USEPA; Case No. 1-79-146.

2.c This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart FFFF, "National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities." These requirements are specified in Attachment B of this permit.

2.d On October 17, 2001, final Findings and Orders were issued to the permittee by the Director of the Ohio EPA. In those Findings and Orders, the Director found probable cause that the particulate emissions from emissions units P925, P926, and P927 are and have been causing a public nuisance, in violation of OAC rule 3745-15-07. As a result of that finding, the Director revoked the exemptions contained in OAC rule 3745-17-08 for these emissions units and required the permittee to submit a control plan and schedule for achieving compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B). The permittee failed to submit an acceptable control plan and schedule, and the particulate emissions from these emissions units continue to cause a public nuisance.

Emissions units P925, P926, and P927 are subject to the USEPA's new MACT requirements in 40 CFR Part 63, Subpart FFFF. Compliance with these requirements should result in compliance with OAC rules 3745-17-07(B) and 3745-17-08(B) and should abate the existing public nuisance.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner while oxygen lancing is occuring.

II. Operational Restrictions (continued)

2. The scrubber water flow rates and recirculation water flow rates for scrubber P927SC01 shall be maintained at or above the minimum scrubber water flow rates and recirculation water flow rates established during the most recent stack test which demonstrated the emission unit to be in compliance.

The minimum scrubber water flow rates and recirculation water flow rates shall be determined based on the average flow rates recorded during the most recent stack test that demonstrated the emission unit to be in compliance.

3. The pressure drop across the scrubber P927SC01 shall be continuously maintained within the the range of 45-50 inches of water at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber , the scrubber water flow rate, and the recirculation water flow rate for scrubber P927SC01 while the emissions unit is in operation.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;

b. the scrubber water flow rate for the scrubber, in gallons per minute, on a once per shift basis;

c. the recirculation water flow rate for the scrubber, in gallons per minute, on a once per shift basis; and

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit for each scrubber.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the presence of a pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

a. all periods during which the pilot flame was not present during the oxygen lancing process; and

b. the operating times for the flare, monitoring equipment, and the associated emissions unit.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points venting to the ambient air (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 minimize or eliminate the 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.

4. The permitte shall collect and record the following information on a weekly basis:

a. the total amount of No.2 Bundles charged to the vessel, recorded in tons;

b. the total metallic charge to the vessel, recorded in tons; and

c. the percentance of No.2 Bundles charged to the vessel (the amount recored in line a. divided by the amount recorded in line b. multiplied by 100)

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels for scrubber P927SC01:

a. the static pressure drop across the scrubber;

b. the scrubber water flow rate; and

c. the scrubber water recirculation rate.

Should any deviations occur, the corrective action taken to remedy the deviation, along with the date the corrective action taken shall be submitted.

2. The permittee shall submit deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the point of capture 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.

4. The permittee shall submit deviation (excursion) reports that identify each week the percentage of No. 2 Bundles exceed five percent of the total metallic charge.

5. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a 3-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.c Emission Limitation:

Particulate emissions from the exhaust gases from the scrubber shall not exceed 69.19 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P926SC01 to demonstrate compliance with the allowable mass emission limitation for particulates.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 of 40 CFR Part 60 Appendix A.

iv. The scrubber water flow rate and recirculation water flow rate shall be recorded at fifteen-minute intervals during the stack test.

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 Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CAS/OB (P934)

Activity Description: This is a steel refining station using argon stirring and oxygen blowing for certain steel grades.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Molten steel refining station vented to a baghouse	OAC rule 3745-31-05(A)(3) (PTI 14-1663)	See A.I.2.a -A.I.2.c, and A.II.2.
	OAC rule 3745-17-07(A)(1)	The visible emission limitations specified in OAC rule 3745-17-07(A)(1) are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)(1)	The fugitive visible emission limitations specified in OAC rule 3745-17-07(B) are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)(3)	The particulate emissions from the refining station shall be vented to the baghouse in a manner that will minimize or eliminate visible emissions of fugitive dust.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified in OAC rule 3745-17-11(B)(1) is less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Visible particulate emissions from the baghouse outlet shall not exceed five percent opacity as a six-minute average.

2.b Visible fugitive particulate emissions from the vacuum degas building shall not exceed six percent opacity as a three-minute average.

2.c The particulate emissions from the exhaust gases exiting the baghouse associated with this emissions unit shall not exceed the following:

i. 0.02 grain per dry standard cubic feet; or
ii. 1.92 lbs/hr.

II. Operational Restrictions

1. The pressure drop across baghouse P934/5BH01shall be maintained within the range established during the most recent stack test that demonstrated compliance.

2. The following production limitations shall not be exceeded:

a. 15 heats per day; and
b. 200 minutes of oxygen blowing per day.

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 installed, 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 once per shift basis.

2. The permittee shall collect and record the following information on a daily basis for this emissions unit:

a. number of heats per day; and
b. total daily minutes of oxygen blowing.

3. 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.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions. 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly 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 permittee shall notify the Hamilton County Department of Environmental Services in writing of any exceedance of the production limitations specified in A.II.2. This notification shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the points of capture serving this emissions unit and (b) describe any corrective actions taken to 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.

IV. Reporting Requirements (continued)

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.

5. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

Visible PE observations shall be made at egress points of the building housing the coating operation.

1.b Emission Limitation:

Visible particulate emissions from the exhaust gases exiting the baghouse associated with this emissions unit shall not exceed five percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.c Emission Limitation:

Particulate emissions from the exhaust gases exiting the baghouse shalll not exceed 1.92 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.d Emission Limitation:

0.02 grain/dry standard cubic foot from the exhaust gases from baghouse P934/5BH01

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P934/5BH01 to demonstrate compliance with the allowable mass emission limitation for particulates from the hot pouring and desulfurization line of 1.92 lbs per hour. In addition to the pounds of particulate per hour emission rate from P934/5BH01, the grain per dry standard cubic foot emission rate shall be calculated to determine compliance with the 0.02 grains per dry standard cubic foot emission limit from the exhaust gases of the baghouse.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A. During each test run, visible emission readings shall be performed in accordance with USEPA Method 9 to demonstrate compliance with the opacity limitations for the degas building and the baghouse outlet.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vacuum Degasser (P935)

Activity Description: The vacuum degassing system is a molten steel refining station for certain steel grades.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Vacuum degassing with two condensers and baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	Particulate emissions from all stacks associated with this emissions unit shall not exceed 73.1 pounds per hour. See A.I.2.a below.
Unloading of additive into hoppers, equipped with a baghouse	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible emissions of fugitive dust. See section A.I.2.b below.

2. Additional Terms and Conditions

2.a The particulate emissions limitation of 73.1 pounds per hour is based upon a process weight rate of 700 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 73.1 lbs/hour, the permittee shall comply with the more stringent limitation.

2.b The permittee shall minimize or eliminate visible emissions of fugitive dust through the employment of RACM. These measures shall include, but not be limited to, the use of partial enclosures surrounding the additive handling operaton and the venting of fugitive particulate emissions from the additive handling operation to a baghouse.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points venting to the ambient air (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 minimize or eliminate the 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.

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 baghouse 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 semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from 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.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions from the exhaust gases from all stacks associated with this emission unit shalll not exceed 73.1 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

i. The emission testing shall be conducted within 3 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlets of P935CO01, P935CO02, and P9354/5BH01 to demonstrate compliance with the allowable mass emission limitation for particulates from the steel shot blasting line of 73.1 lbs per hour.

iii. A particulate emissions test also shall be conducted at the inlet of P935CO01, P935CO02, and P9354/5BH01to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A. In addition, visible emission readings, using USEPA Method 9, shall be performed during each test run.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

V. Testing Requirements (continued)

1.d Emission Limitation:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

Visible PE observations shall be made at egress points of the building housing the material handling operation.

VI. Miscellaneous Requirements

1. None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Desul. Station (P956)

Activity Description: This is a spare desulfurization facility used during routine maintenance of the main operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Hot metal pouring and desulfurization process with baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)(3)	See A.I.2.a below.
	OAC rule 3745-18-15(C)(9)	Sulfur dioxide emissions shall not exceed 0.29 pounds of sulfur dioxide per ton of product from the station. This emissions unit shall not be operated when emissions unit P047 is in operation.

2. Additional Terms and Conditions

2.a The permittee shall use hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust from the hot metal pouring and desulfurization process to the baghouse. The control equipment associated with the hot metal pouring and desulfurization process shall meet the following requirements:

i. the collection efficiency shall be 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; and

ii. the control equipment shall achieve an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s) whichever is less stringent.

2. Additional Terms and Conditions (continued)

2.b Based on information provided in AP-42, Fifth Edition, Section 12.5.2.3, Emissions and Controls for hot metal desulfurization, and emission information provided by AK Steel, it is assumed that the potential to emit for sulfur dioxide emissions from this emission unit is well below the allowable emission rate; therefore, it is not necessary to establish monitoring, record keeping, and reporting requirements to ensure ongoing compliance. AP-42 list no SO2 emissions from the hot metal metal desulfurization processs, AK steel estimates 1.5 lbs/hr SO2, at maximum production levels this equates to an emission rate well below the allowable SO2 emission limit listed in section A.I.1 of this permit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a record of all times this emissions unit was in operation concurrently with emissions unit P047.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions at the point of capture 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 minimize or eliminate the 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 perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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 notify the Hamilton County Department of Environmental Services in writing of any time periods emissions units P956 and P047 were in operation at the same time. The notification shall include a listing of all times emission units P956 and P047 were in operaiton and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed at the points of capture 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.

IV. Reporting Requirements (continued)

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Visible fugitive particulate emissions shall not exceed 20 percent opacity, as a three-minute average except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

1.b Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

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

i. The emission testing shall be conducted within 6 months of the effective date of this permit. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

ii. The emission testing shall be conducted at the outlet of P047BH01 to demonstrate compliance with the allowable particulate emissions rate of 0.030 grains per dry standard cubic foot.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60 Appendix A. Visible emission readings, using USEPA Method 22, shallbe performed during each test run.

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 Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s)of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

1.d Emission Limitation:

0.030 grain/dry standard cubic foot from the exhaust gases from baghouse P956BH01

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.40 pounds of sulfur dioxide per ton of product from the station.

Applicable Compliance Method:

Based on information provided in AP 42, Fifth Edition, Section 12.5.2.3, Emissions and Controls for hot metal desulfurization, and emission information provided by AK Steel, it is assumed that the potential to emit for sulfur dioxide is well below the allowable emission rate. AP-42 list no SO2 emissions from the hot metal metal desulfurization processs. AK steel estimates 1.5 lbs/hr SO2. At maximum production levels this equates to an emission rate well below the allowable SO2 emission limit listed in section A.I.1 of this permit.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: E.Tar Storage Tank (T002)

Activity Description: The east tar storage tank is used to store tar, a coke by-product.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
700,000-gallon, fixed roof, tar storage tank with gas blanketing	40 CFR Part 61, Subpart L	No detectible fugitive VOC emissions from equipment in benzene service
	40 CFR Part 61, Subpart V	Leak detection and repair program for fugitive VOC emissions from equipment in benzene service

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the by-products recovery plant in accordance with the requirements of 40 CFR 61.132.

1.a The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

II. Operational Restrictions (continued)

2. The permittee shall equip each open ended valve or line with a cap, blind flange, plug or second valve. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

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

When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 61.242-6(a) at all other times.

3. Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

III. Monitoring and/or Record Keeping Requirements

1. Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

3. Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

4. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

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

5.a Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

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

5.c Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

5.d When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

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

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

5.f Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

5.g Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

i. the permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

5.h Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

i. the permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;

ii. the process unit within which the valve is located is an existing process unit; and

iii. the permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

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

6. Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

7. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.

Delay of repair for valves will be allowed if:

a. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

b. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

Delay of repair for pumps will be allowed if:

a. repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

b. repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

8. Closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

9. Control devices that are used to comply with the provisions of 40 CFR Part 61 Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

10. Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

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

11. Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

a. Monitoring shall comply with Method 21 of Appendix A of 40 CFR Part 60.

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

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

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

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

12. To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

13.a Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

13.b The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

13.c Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

14. The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

b. the dates and descriptions of any changes in the design specifications

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

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

15. The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

16. The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

17. When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

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

18. When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

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

19. The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

20. The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve; and

b. a list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

21. The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

22. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

23. Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

IV. Reporting Requirements

1. A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in a through e below.

a. for sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133:

i. a brief description of any visible defect in the source or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

2. The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: H Ladle Preheater 1 (Z001)

Activity Description: The No. 1 Stelter & Brinck horizontal ladle preheater is used to preheat steel ladles.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
15 mmBtu/hr, direct fired, natural gas, ladle preheater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	RThe requirement to employ reasonable available control measures (RACM) is satisfied through the use of natural gas as a fuel.

2. Additional Terms and Conditions

2.a Because this emissions unit burns only natural gas, there is no applicable SO2 emission limitation from OAC rule 3745-18-06.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: H Ladle Preheater 2 (Z002)

Activity Description: The No. 2 Stelter & Brinck horizontal ladle preheater is used to preheat steel ladles.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
15 mmBtu/hr, direct fired, natural gas, ladle preheater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The requirement to emply reasonable available control measures (RACM) is satisfied through the use of natural gas as a fuel.

2. Additional Terms and Conditions

2.a Because this emissions unit burns only natural gas, there is no applicable SO2 emission limitation from OAC rule 3745-18-06.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: H Ladle Preheater 3 (Z003)

Activity Description: The No. 3 Stelter & Brinck horizontal ladle preheater is used to preheat steel ladles.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
15 mmBtu/hr, direct fired, natural gas, ladle preheater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The requirement to emply reasonable available control measures (RACM) is satisfied through the use of natural gas as a fuel.

2. Additional Terms and Conditions

2.a Because this emissions unit burns only natural gas, there is no applicable SO2 emission limitation from OAC rule 3745-18-06.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V Ladle Preheater (Z004)

Activity Description: The Stelter & Brinck vertical ladle preheater is used to preheat steel ladles.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
15 mmBtu/hr, direct fired, natural gas, ladle preheater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The requirement to emply reasonable available control measures (RACM) is satisfied through the use of natural gas as a fuel.

2. Additional Terms and Conditions

2.a Because this emissions unit burns only natural gas, there is no applicable SO2 emission limitation from OAC rule 3745-18-06.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tundish Preheater1 (Z005)

Activity Description: The No. 1 Stelter & Brinck tundish preheater is used to preheat tundishes.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
12 mmBtu/hr, direct fired, natural gas, ladle preheater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The requirement to employ reasonable available control measures (RACM) is satisfied through the use of natural gas as a fuel.

2. Additional Terms and Conditions

2.a Because this emissions unit burns only natural gas, there is no applicable SO2 emission limitation from OAC rule 3745-18-06.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tundish Preheater 2 (Z006)

Activity Description: The No. 2 Stelter & Brinck tundish preheater is used to preheat tundishes.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
12 mmBtu/hr, direct fired, natural gas, ladle preheater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The requirement to employ reasonable available control measures (RACM) is satisfied through the use of natural gas as a fuel.

2. Additional Terms and Conditions

2.a Because this emissions unit burns only natural gas, there is no applicable SO2 emission limitation from OAC rule 3745-18-06.

II. Operational Restrictions

1. The permittee shall burn only natural gas 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:

V. Testing Requirements (continued)

1.a Emission Limitation:

Fugitive visible particulate emissions shall not exceed six percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Strip Mill (Z015)

Activity Description: The Hot Strip Mill is a hot rolling of steel slabs operation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Hot strip rolling of steel slabs	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity as a three-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.I.2.a. below
Rolling Oil Application	OAC rule 3745-21-09(OO)(1)	The VOC of the rolling oil employed shall not exceed 2.9 pounds of VOC per gallon of oil, excluding water and exempt solvents.

2. Additional Terms and Conditions

2.a The permittee shall employ good operating practices when the hot rolling steel slabs is occuring to minimize fugitive PE.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the building containing this emissions unit. The presence or absence of abnormal any visible emissions shall be noted in an operations log. If abnormal 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 abnormal 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 shall collect and record the following information on a monthly basis:

a. the name and identification of each rolling oil employed; and

b. the VOC content, as applied, excluding water and exempt solvents, in pounds per gallon, of each rolling oil employed.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing that a non-compliant rolling oil was employed. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

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:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a 3-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Compliance with the VOC content limitation specified in A.I.1 may be demonstrated by the information collected and recorded in A.III.2 of these terms and conditions.

If required, the VOC content of the coatings employed shall be determined by USEPA Method 24. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Attachment A

AK Steel
Ohio EPA Premise Number: 1409010006

40 CFR Part 63 Subpart CCCCC--National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks

Sec. 63.7280 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for pushing, soaking, quenching, and battery stacks at coke oven batteries. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations, work practice standards, and operation and maintenance requirements in this subpart.

Sec. 63.7281 Am I subject to this subpart?

You are subject to this subpart if you own or operate a coke oven battery at a coke plant that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

Sec. 63.7282 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source at your coke plant. The affected source is each coke oven battery.

(b) This subpart covers emissions from pushing, soaking, quenching, and battery stacks from each affected source.

(c) An affected source at your coke plant is existing if you commenced construction or reconstruction of the affected source before July 3, 2001.

(d) An affected source at your coke plant is new if you commenced construction or reconstruction of the affected source on or after July 3, 2001. An affected source is reconstructed if it meets the definition of ``reconstruction'' in Sec. 63.2.

Sec. 63.7283 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 14, 2006.

(b) If you have a new affected source and its initial startup date is on or before April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by April 14, 2006.

(c) If you have a new affected source and its initial startup date is after April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) You must meet the notification and schedule requirements in Sec. 63.7340. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations and Work Practice Standards

Sec. 63.7290 What emission limitations must I meet for capture systems and control devices applied to pushing emissions?

(a) You must not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a new or existing coke oven battery that exceed the applicable limit in paragraphs (a)(1) through (4) of this section:

(1) 0.01 grain per dry standard cubic foot (gr/dscf) if a cokeside shed is used to capture emissions;

(2) 0.02 pound per ton (lb/ton) of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(3) If a mobile scrubber car that does not capture emissions during travel is used:

(i) 0.03 lb/ton of coke for a control device applied to pushing emissions from a short battery, or

(ii) 0.01 lb/ton of coke for a control device applied to pushing emissions from a tall battery; and

(4) 0.04 lb/ton of coke if a mobile scrubber car that captures emissions during travel is used.

(b) You must meet each operating limit in paragraphs (b)(1) through (3) of this section that applies to you for a new or existing coke oven battery.

(1) For each venturi scrubber applied to pushing emissions, you must maintain the daily average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(2) For each hot water scrubber applied to pushing emissions, you must maintain the daily average water pressure and water temperature at or above the minimum levels established during the initial performance test.

(3) For each capture system applied to pushing emissions, you must:

(i) Maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test; or

(ii) Maintain the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial performance test.

Sec. 63.7291 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with vertical flues?

(a) You must meet each requirement in paragraphs (a)(1) through (7) of this section for each new or existing by-product coke oven battery with vertical flues.

(1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, you must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in Sec. 63.7334(a), and you must document why the oven was not observed within a 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in Sec. 63.7334(a).

(2) If two or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery.

(3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of four pushes. If necessary due to circumstances that were not reasonably avoidable, you may observe fewer than four consecutive pushes in a day; however, you must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. You may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

(4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.

(5) If the average opacity for any individual push exceeds 30

percent opacity for any short battery or 35 percent opacity for any tall battery, you must take corrective action and/or increase coking time for that oven. You must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using Equation 1 of section 63.7291, whichever is greater:

$X = 0.55 * Y$ (Eq. 1)

Where:
X = Number of calendar days allowed to complete corrective action or increase coking time; and
Y = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.

(6)(i) You must demonstrate that the corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in Sec. 63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in paragraph (a)(5) of this section.

(ii) After implementing any additional corrective action and/or increased coking time required under paragraph (a)(6)(i) or (a)(7)(ii) of this section, you must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, you must observe and record the opacity of the first two pushes for the

oven capable of being observed using the procedures in Sec. 63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must follow the procedures in paragraph (a)(6)(iii) of this section.

(iii) If the corrective action and/or increased coking time was unsuccessful as described in paragraph (a)(6)(ii) of this section, you must repeat the procedures in paragraph (a)(6)(ii) of this section until the corrective action and/or increased coking time is successful. You must report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under paragraph (a)(6)(ii) of this section.

(7)(i) If at any time you place an oven on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery or 35 percent for a tall battery, you must keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in paragraph (a)(7)(ii) or (a)(7)(iii) of this section.

(ii) To qualify for a decreased coking time for an oven placed on increased coking time in accordance with paragraph (a)(5) or (6) of this section, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in Sec. 63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

(iii) If the attempt to qualify for decreased coking time was unsuccessful as described in paragraph (a)(7)(ii) of this section, you may again attempt to qualify for decreased coking time for the oven. To do this, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in Sec. 63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

(iv) You must report to the permitting authority as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in paragraph (a)(7)(iii) of this section.

(b) As provided in Sec. 63.6(g), you may request to use an alternative to the work practice standards in paragraph (a) of this section.

Sec. 63.7292 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with horizontal flues?

(a) You must comply with each of the requirements in paragraphs (a)(1) through (4) of this section.

(1) Prepare and operate by a written plan that will eliminate or minimize incomplete coking for each by-product coke oven battery with horizontal flues. You must submit the plan and supporting documentation to the Administrator (or delegated authority) for approval no later than 90 days after completing all observations and measurements required for the study in paragraph (a)(3) of this section or April 14, 2004, whichever is earlier. You must begin operating by the plan requirements by the compliance date that is specified in Sec. 63.7283. The written plan must identify minimum flue temperatures for different coking times and a battery-wide minimum acceptable flue temperature for

any oven at any coking time.

(2) Submit the written plan and supporting documentation to the Administrator (or delegated authority) for review and approval. Include all data collected during the study described in paragraph (a)(3) of this section. If the Administrator (or delegated authority) disapproves the plan, you must revise the plan as directed by the Administrator (or delegated authority) and submit the amended plan for approval. The Administrator (or delegated authority) may require you to collect and submit additional data. You must operate according to your submitted plan (or submitted amended plan, if any) until the Administrator (or delegated authority) approves your plan.

(3) You must base your written plan on a study that you conduct that meets each of the requirements listed in paragraphs (a)(3)(i) through (x) of this section.

(i) Initiate the study by July 14, 2003. Notify the Administrator (or delegated authority) at least 7 days prior to initiating the study according to the requirements in Sec. 63.7340(f).

(ii) Conduct the study under representative operating conditions, including but not limited to the range of moisture content and volatile matter in the coal that is charged.

(iii) Include every oven in the study and observe at least two pushes from each oven.

(iv) For each push observed, measure and record the temperature of every flue within 2 hours before the scheduled pushing time. Document the oven number, date, and time the oven was charged and pushed, and calculate the net coking time.

(v) For each push observed, document the factors to be used to identify pushes that are incompletely coked. These factors must include (but are not limited to): average opacity during the push, average opacity during travel to the quench tower, average of six highest consecutive observations during both push and travel, highest single opacity reading, color of the emissions (especially noting any yellow or brown emissions), presence of excessive smoke during travel to the quench tower, percent volatile matter in the coke, percent volatile matter and percent moisture in the coal that is charged, and the date the oven was last rebuilt or completely relined. Additional documentation may be provided in the form of pictures or videotape of emissions during the push and travel. All opacity observations must be conducted in accordance with the procedures in Sec. 63.7334(a)(3) through (7).

(vi) Inspect the inside walls of the oven after each observed push for cool spots as indicated by a flue that is darker than others (the oven walls should be red hot) and record the results.

(vii) For each push observed, note where incomplete coking occurs if possible (e.g., coke side end, pusher side end, top, or center of the coke mass). For any push with incomplete coking, investigate and document the probable cause.

(viii) Use the documented factors in paragraph (a)(3)(v) of this section to identify pushes that were completely coked and those that were not completely coked. Provide a rationale for the determination based on the documentation of factors observed during the study.

(ix) Use only the flue temperature and coking time data for pushes that were completely coked to identify minimum flue temperatures for various coking times. Submit the criteria used to determine complete coking, as well as a table of coking times and corresponding temperatures for complete coking as part of your plan.

(x) Determine the battery-wide minimum acceptable flue temperature for any oven. This temperature will be equal to the lowest temperature that provided complete coking as determined in paragraph (a)(3)(ix) of this section.

(4) You must operate according to the coking times and temperatures in your approved plan and the requirements in paragraphs (a)(4)(i) through (viii) of this section.

(i) Measure and record the percent volatile matter in the coal that is charged.

(ii) Measure and record the temperature of all flues on two ovens per day within 2 hours before the scheduled pushing time for each oven. Measure and record the temperature of all flues on each oven at least once each month.

(iii) For each oven observed in accordance with paragraph (a)(4)(ii) of this section, record the time each oven is charged and pushed and calculate and record the net coking time. If any measured flue temperature for an oven is below the minimum flue temperature for an oven's scheduled coking time as established in the written plan, increase the coking time for the oven to the coking time in the written plan for the observed flue temperature before pushing the oven.

(iv) If you increased the coking time for any oven in accordance with paragraph (a)(4)(iii) of this section, you must investigate the cause of the low flue temperature and take corrective action to fix the problem. You must continue to measure and record the temperature of all flues for the oven within 2 hours before each scheduled pushing time until the measurements meet the minimum temperature requirements for the increased coking time for two consecutive pushes. If any measured flue temperature for an oven on increased coking time falls below the minimum flue temperature for the increased coking time, as established in the written plan, you must increase the coking time for the oven to

the coking time specified in the written plan for the observed flue temperature before pushing the oven. The oven must continue to operate at this coking time (or at a longer coking time if the temperature falls below the minimum allowed for the increased coking time) until the problem has been corrected, and you have confirmed that the corrective action was successful as required by paragraph (a)(4)(v) of this section.

(v) Once the heating problem has been corrected, the oven may be returned to the battery's normal coking schedule. You must then measure and record the flue temperatures for the oven within 2 hours before the scheduled pushing time for the next two consecutive pushes. If any flue temperature measurement is below the minimum flue temperature for that coking time established in the written plan, repeat the procedures in paragraphs (a)(4)(iii) and (iv) of this section.

(vi) If any flue temperature measurement is below the battery-wide minimum acceptable temperature for complete coking established in the written plan for any oven at any coking time, you must remove the oven from service for repairs.

(vii) For an oven that has been repaired and returned to service after being removed from service in accordance with paragraph (a)(4)(vi) of this section, you must measure and record the temperatures of all flues for the oven within 2 hours before the first scheduled pushing time. If any flue temperature measurement is below the minimum flue temperature for the scheduled coking time, as established in the written plan, you must repeat the procedures described in paragraphs (a)(4)(iii) and (iv) of this section.

(viii) For an oven that has been repaired and returned to service after removal from service in accordance with paragraph (a)(4)(vi) of this section, you must report as a deviation to the permitting authority any flue temperature measurement made during the initial coking cycle after return to service that is below the lowest acceptable minimum flue temperature.

(b) As provided in Sec. 63.6(g), you may request to use an alternative to the work practice standards in paragraph (a) of this section.

Sec. 63.7293 What work practice standards must I meet for fugitive pushing emissions if I have a non-recovery coke oven battery?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each new and existing non-recovery coke oven battery.

(1) You must visually inspect each oven prior to pushing by opening the door damper and observing the bed of coke.

(2) Do not push the oven unless the visual inspection indicates

that there is no smoke in the open space above the coke bed and that there is an unobstructed view of the door on the opposite side of the oven.

(b) As provided in Sec. 63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

Sec. 63.7294 What work practice standard must I meet for soaking?

(a) For each new and existing by-product coke oven battery, you must prepare and operate at all times according to a written work practice plan for soaking. Each plan must include measures and procedures to:

(1) Train topside workers to identify soaking emissions that require corrective actions.

(2) Damper the oven off the collecting main prior to opening the standpipe cap.

(3) Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.

(4) If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are not limited to, reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.

(5) If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, you must put the oven back on the collecting main until it is completely coked or you must ignite the emissions.

(b) As provided in Sec. 63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

Sec. 63.7295 What requirements must I meet for quenching?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each quench tower and backup quench station at a new or existing coke oven battery.

(1) For the quenching of hot coke, you must meet the requirements in paragraph (a)(1)(i) or (ii) of this section.

(i) The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L);

or

(ii) The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.

(2) You must use acceptable makeup water, as defined in Sec. 63.7352, as makeup water for quenching.

(b) For each quench tower at a new or existing coke oven battery and each backup quench station at a new coke oven battery, you must meet each of the requirements in paragraphs (b)(1) through (4) of this section.

(1) You must equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.

(2) You must wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified in paragraphs (b)(2)(i) and (ii) of this section.

(i) You are not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan.

(ii) You must continuously record the ambient temperature on days that the baffles were not washed.

(3) You must inspect each quench tower monthly for damaged or missing baffles and blockage.

(4) You must initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.

(c) As provided in Sec. 63.6(g), you may request to use an alternative to the work practice standards in paragraph (b) of this section.

Sec. 63.7296 What emission limitations must I meet for battery stacks?

You must not discharge to the atmosphere any emissions from any battery stack at a new or existing by-product coke oven battery that exhibit an opacity greater than the applicable limit in paragraphs (a) and (b) of this section.

(a) Daily average of 15 percent opacity for a battery on a normal coking cycle.

(b) Daily average of 20 percent opacity for a battery on batterywide extended coking.

Operation and Maintenance Requirements

Sec. 63.7300 What are my operation and maintenance requirements?

(a) As required by Sec. 63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of new or existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed in paragraphs (b)(1) through (6) of this section.

(1) Frequency and method of recording underfiring gas parameters.

(2) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures.

(3) Procedures to prevent pushing an oven before it is fully coked.

(4) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged.

(5) Frequency and procedures for inspecting flues, burners, and nozzles.

(6) Schedule and procedures for the daily washing of baffles.

(c) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from a new or existing coke oven battery. Each plan must address at a minimum the elements in paragraphs (c)(1) through (3) of this section.

(1) Monthly inspections of the equipment that are important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered,

you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

General Compliance Requirements

Sec. 63.7310 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in Sec. 63.2.

(b) During the period between the compliance date specified for your affected source in Sec. 63.7283 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in Sec. 63.6(e)(3).

Initial Compliance Requirements

Sec. 63.7320 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) As required in Sec. 63.7(a)(2), you must conduct a performance test to demonstrate compliance with each limit in Sec. 63.7290(a) for emissions of particulate matter from a control device applied to pushing emissions that applies to you within 180 calendar days after the compliance date that is specified in Sec. 63.7283.

(b) You must conduct performance tests to demonstrate compliance

with the TDS limit or constituent limit for quench water in Sec. 63.7295(a)(1) and each opacity limit in Sec. 63.7297(a) for a by-product coke oven battery stack by the compliance date that is specified in Sec. 63.7283.

(c) For each work practice standard and operation and maintenance requirement that applies to you, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in Sec. 63.7283.

(d) If you commenced construction or reconstruction between July 3, 2001 and April 14, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than October 14, 2003, or no later than 180 calendar days after startup of the source, whichever is later, according to Sec. 63.7(a)(2)(ix).

(e) If you commenced construction or reconstruction between July 3, 2001 and April 14, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by October 11, 2006, or after startup of the source, whichever is later, according to Sec. 63.7(a)(2)(ix).

Sec. 63.7321 When must I conduct subsequent performance tests?

For each control device subject to an emission limit for particulate matter in Sec. 63.7290(a), you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

Sec. 63.7322 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with the emission limit for particulate matter from a control device applied to pushing emissions where a cokeside shed is the capture system, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section. To determine compliance with a process-weighted mass rate of particulate matter (lb/ton of coke) from a control device applied to pushing emissions where a cokeside shed is not used, follow the test methods and procedures in paragraphs (b)(1) through (4) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to 40 CFR part 60.

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

(2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

(3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in your source test plan for calculating coke yield from the quantity of coal charged to an individual oven.

(4) Compute the process-weighted mass emissions (Ep) for each test run using Equation 1 of section 63.7322:

Sec. 63.7323 What procedures must I use to establish operating limits?

(a) For a venturi scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for pressure drop and scrubber water flow rate according to the procedures in paragraphs (a)(1) and (2) of this section.

(1) Using the continuous parameter monitoring systems (CPMS) required in Sec. 63.7330(b), measure and record the pressure drop and scrubber water flow rate for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement and one scrubber water flow rate measurement must be obtained for each push.

(2) Compute and record the average pressure drop and scrubber water flow rate for each test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate values recorded during any of the three runs that meet the applicable emission limit.

(b) For a hot water scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for water pressure and water temperature according to the procedures in paragraphs (b)(1) and (2) of this section.

(1) Using the CPMS required in Sec. 63.7330(c), measure and record the hot water pressure and temperature for each particulate matter test run during periods of pushing. A minimum of one pressure measurement and one temperature measurement must be made just prior to each push by monitoring the hot water holding tank on the mobile scrubber car.

(2) Compute and record the average water pressure and temperature for each test run. Your operating limits are the lowest pressure and temperature values recorded during any of the three runs that meet the applicable emission limit.

(c) For a capture system applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit for the fan motor amperes or volumetric flow rate according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If you elect the operating limit in Sec. 63.7290(b)(3)(i) for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. Your operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.

(2) If you elect the operating limit in Sec. 63.7290(b)(3)(ii) for volumetric flow rate, measure and record the total volumetric flow rate at the inlet of the control device during each push sampled for each particulate matter test run. Your operating limit is the lowest volumetric flow rate recorded during any of the three runs that meet the emission limit.

(d) You may change the operating limit for a scrubber or capture system if you meet the requirements in paragraphs (d)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in Sec. 63.7290(a).

(3) Establish revised operating limits according to the applicable procedures in paragraph (a) through (c) of this section.

Sec. 63.7324 What procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with the daily average opacity limit for stacks of 15 percent for a by-product coke oven battery on a normal

coking cycle or 20 percent for a by-product coke oven battery on batterywide extended coking, follow the test methods and procedures in paragraphs (b)(1) through (3) of this section.

(1) Using the continuous opacity monitoring system (COMS) required in Sec. 63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.

(2) Reduce the monitoring data to hourly averages as specified in Sec. 63.8(g)(2).

(3) Compute and record the 24-hour (daily) average of the COMS data.

Sec. 63.7325 What test methods and other procedures must I use to demonstrate initial compliance with the TDS or constituent limits for quench water?

(a) If you elect the TDS limit for quench water in Sec. 63.7295(a)(1)(i), you must conduct each performance test that applies to your affected source according to the conditions in paragraphs (a)(1) and (2) of this section.

(1) Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) Determine the TDS concentration of the sample using Method 160.1 in 40 CFR part 136.3 (see ``residue--filterable''), except that you must dry the total filterable residue at 103 to 105 [deg]C (degrees Centigrade) instead of 180 [deg]C.

(b) If at any time you elect to meet the alternative requirements for quench water in Sec. 63.7295(a)(1)(ii), you must establish a site-specific constituent limit according to the procedures in paragraphs (b)(1) through (4) of this section.

(1) Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) For each sample, determine the TDS concentration according to the requirements in paragraph (a)(2) of this section and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 CFR part 136 or an approved alternative method.

(3) Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L. This

concentration is the site-specific constituent limit.

(4) Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review and approval.

(c) If you elect the constituent limit for quench water in Sec. 63.7295(a)(1)(ii), you must conduct each performance test that applies to your affected source according to the conditions in paragraphs (c)(1) and (2) of this section.

(1) Take a quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) Determine the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in the sample using the applicable methods in 40 CFR part 136 or an approved alternative method.

Sec. 63.7326 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each coke oven battery subject to the emission limit for particulate matter from a control device applied to pushing emissions, you have demonstrated initial compliance if you meet the requirements in paragraphs (a)(1) through (4) of this section that apply to you.

(1) The concentration of particulate matter, measured in accordance with the performance test procedures in Sec. 63.7322(b)(1) and (2), did not exceed 0.01 gr/dscf for a control device where a cokeside shed is used to capture pushing emissions or the process-weighted mass rate of particulate matter (lb/ton of coke), measured in accordance with the performance test procedures in Sec. 63.7322(b)(1) through (4), did not exceed:

(i) 0.02 lb/ton of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(ii) If a mobile scrubber car that does not capture emissions during travel is used, 0.03 lb/ton of coke from a control device applied to pushing emissions from a short coke oven battery or 0.01 lb/ton of coke from a control device applied to pushing emissions from a tall coke oven battery; and

(iii) 0.04 lb/ton of coke if a mobile scrubber car that captures emissions during travel is used.

(2) For each venturi scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with Sec. 63.7323(a).

(3) For each hot water scrubber applied to pushing emissions, you

have established appropriate site-specific operating limits and have a record of the water pressure and temperature measured during the performance test in accordance with Sec. 63.7323(b).

(4) For each capture system applied to pushing emissions, you have established an appropriate site-specific operating limit, and:

(i) If you elect the operating limit in Sec. 63.7290(b)(3)(i) for fan motor amperes, you have a record of the fan motor amperes during the performance test in accordance with Sec. 63.7323(c)(1); or

(ii) If you elect the operating limit in Sec. 63.7290(b)(3)(ii) for volumetric flow rate, you have a record of the total volumetric flow rate at the inlet of the control device measured during the performance test in accordance with Sec. 63.7323(c)(2).

(b) For each new or existing by-product coke oven battery subject to the opacity limit for stacks in Sec. 63.7296(a), you have demonstrated initial compliance if the daily average opacity, as measured according to the performance test procedures in Sec. 63.7324(b), is no more than 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking.

(c) For each new or existing by-product coke oven battery subject to the TDS limit or constituent limits for quench water in Sec. 63.7295(a)(1),

(1) You have demonstrated initial compliance with the TDS limit in Sec. 63.7295(a)(1)(i) if the TDS concentration, as measured according to the performance test procedures in Sec. 63.7325(a), does not exceed 1,100 mg/L.

(2) You have demonstrated initial compliance with the constituent limit in Sec. 63.7295(a)(1)(ii) if:

(i) You have established a site-specific constituent limit according to the procedures in Sec. 63.7325(b); and

(ii) The sum of the constituent concentrations, as measured according to the performance test procedures in Sec. 63.7325(c), is less than or equal to the site-specific limit.

(d) For each by-product coke oven battery stack subject to an opacity limit in Sec. 63.7296(a) and each by-product coke oven battery subject to the requirements for quench water in Sec. 63.7295(a)(1), you must submit a notification of compliance status containing the results of the COMS performance test for battery stacks and the quench water performance test (TDS or constituent limit) according to Sec. 63.7340(e)(1). For each particulate matter emission limitation that applies to you, you must submit a notification of compliance status containing the results of the performance test according to Sec. 63.7340(e)(2).

Sec. 63.7327 How do I demonstrate initial compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in Sec. 63.7291(a), you have demonstrated initial compliance if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in Sec. 63.7283.

(b) For each by-product coke oven battery with horizontal flues subject to the work practice standards for fugitive pushing emissions in Sec. 63.7292(a), you have demonstrated initial compliance if you have met the requirements of paragraphs (b)(1) and (2) of this section:

(1) You have prepared and submitted a written plan and supporting documentation establishing appropriate minimum flue temperatures for different coking times and the lowest acceptable temperature to the Administrator (or delegated authority) for review and approval; and

(2) You certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in Sec. 63.7283.

(c) For each non-recovery coke oven battery subject to the work practice standards for fugitive pushing emissions in Sec. 63.7293(a), you have demonstrated initial compliance if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in Sec. 63.7283.

(d) For each by-product coke oven battery subject to the work practice standards for soaking in Sec. 63.7294, you have demonstrated initial compliance if you have met the requirements of paragraphs (d)(1) and (2) of this section:

(1) You have prepared and submitted a written work practice plan in accordance with Sec. 63.7294(a); and

(2) You certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in Sec. 63.7283.

(e) For each coke oven battery, you have demonstrated initial compliance with the work practice standards for quenching in Sec. 63.7295(b) if you certify in your notification of compliance status that you have met the requirements of paragraphs (e)(1) and (2) of this section:

(1) You have installed the required equipment in each quench tower; and

(2) You will meet each of the work practice requirements beginning no later than the compliance date that is specified in Sec. 63.7283.

(f) For each work practice standard that applies to you, you must submit a notification of compliance status according to the requirements in Sec. 63.7340(e)(1).

Sec. 63.7328 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

You have demonstrated initial compliance if you certify in your notification of compliance status that you have met the requirements of paragraphs (a) through (d) of this section:

(a) You have prepared the operation and maintenance plans according to the requirements in Sec. 63.7300(b) and (c);

(b) You will operate each by-product coke oven battery and each capture system and control device applied to pushing emissions from a coke oven battery according to the procedures in the plans beginning no later than the compliance date that is specified in Sec. 63.7283;

(c) You have prepared a site-specific monitoring plan according to the requirements in Sec. 63.7331(b); and

(d) You submit a notification of compliance status according to the requirements in Sec. 63.7340(e).

Continuous Compliance Requirements

Sec. 63.7330 What are my monitoring requirements?

(a) For each baghouse applied to pushing emissions from a coke oven battery, you must at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in Sec. 63.7331(a) and conduct inspections at their specified frequency according to the requirements in paragraphs (a)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;

(3) Check the compressed air supply for pulse-jet baghouses each day;

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or

bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(b) For each venturi scrubber applied to pushing emissions, you must at all times monitor the pressure drop and water flow rate using a CPMS according to the requirements in Sec. 63.7331(e).

(c) For each hot water scrubber applied to pushing emissions, you must at all times monitor the water pressure and temperature using a CPMS according to the requirements in Sec. 63.7331(f).

(d) For each capture system applied to pushing emissions, you must at all times monitor the fan motor amperes according to the requirements in Sec. 63.7331(g) or the volumetric flow rate according to the requirements in Sec. 63.7331(h).

(e) For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting each stack using a COMS according to the requirements in Sec. 63.7331(i).

Sec. 63.7331 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each baghouse applied to pushing emissions, you must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (a)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;

(2) The system must provide output of relative changes in particulate matter loadings;

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, ``Fabric Filter Bag Leak Detection Guidance'' (EPA-454/R-98-015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and

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

(b) For each CPMS required in Sec. 63.7330, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (b)(1) through (6) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of Sec. Sec. 63.8(c)(1), (3), (4)(ii), (7), and (8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of Sec. 63.8(d); and

(6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of Sec. Sec. 63.10(c), (e)(1), and (e)(2)(i).

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each venturi scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the pressure drop across the scrubber and scrubber water flow rate during each push according to the requirements in paragraphs (b) through (d) of this section except as specified in paragraphs (e)(1) through (3) of this section.

(1) Each CPMS must complete a measurement at least once per push;

(2) Each CPMS must produce valid data for all pushes; and

(3) Each CPMS must determine and record the daily (24-hour) average of all recorded readings.

(f) For each hot water scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the water pressure and temperature during each push according to the requirements in paragraphs (b) through (d) of this section, except as specified in paragraphs (e)(1) through (3) of this section.

(g) If you elect the operating limit in Sec. 63.7290(b)(3)(i) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the fan motor amperes.

(h) If you elect the operating limit in Sec. 63.7290(b)(3)(ii) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device.

(i) For each by-product coke oven battery, you must install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the requirements in paragraphs (i)(1) through (5) of this section.

(1) You must install, operate, and maintain each COMS according to the requirements in Sec. 63.8(e) and Performance Specification 1 in 40 CFR part 60, appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.

(2) You must conduct a performance evaluation of each COMS according to the requirements in Sec. 63.8 and Performance Specification 1 in appendix B to 40 CFR part 60;

(3) You must develop and implement a quality control program for operating and maintaining each COMS according to the requirements in Sec. 63.8(d). At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit of each COMS;

(4) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. You must reduce the COMS data as specified in Sec. 63.8(g)(2).

(5) You must determine and record the hourly and daily (24-hour) average opacity according to the procedures in Sec. 63.7324(b) using all the 6-minute averages collected for periods during which the COMS is not out-of-control.

Sec. 63.7332 How do I monitor and collect data to demonstrate continuous compliance?

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

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Sec. 63.7333 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) For each control device applied to pushing emissions and subject to the emission limit in Sec. 63.7290(a), you must demonstrate continuous compliance by meeting the requirements in paragraphs (a)(1) and (2) of this section:

(1) Maintaining emissions of particulate matter at or below the applicable limits in paragraphs Sec. 63.7290(a)(1) through (4); and

(2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than twice during each term of your title V operating permit (at mid-term and renewal).

(b) For each venturi scrubber applied to pushing emissions and subject to the operating limits in Sec. 63.7290(b)(1), you must demonstrate continuous compliance by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) Maintaining the daily average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test.

(2) Operating and maintaining each CPMS according to Sec. 63.7331(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to Sec. 63.7331(e)(1) through (3).

(c) For each hot water scrubber applied to pushing emissions and subject to the operating limits in Sec. 63.7290(b)(2), you must demonstrate continuous compliance by meeting the requirements in

paragraphs (c)(1) through (3) of this section.

(1) Maintaining the daily average water pressure and temperature at levels no lower than those established during the initial or subsequent performance test.

(2) Operating and maintaining each CPMS according to Sec. 63.7331(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for water pressure and temperature according to Sec. 63.7331(f).

(d) For each capture system applied to pushing emissions and subject to the operating limit in Sec. 63.7290(b)(3), you must demonstrate continuous compliance by meeting the requirements in paragraph (d)(1) or (2) of this section:

(1) If you elect the operating limit for fan motor amperes in Sec. 63.7290(b)(3)(i):

(i) Maintaining the daily average fan motor amperes at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the fan motor amperes at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(2) If you elect the operating limit for volumetric flow rate in Sec. 63.7290(b)(3)(ii):

(i) Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(e) Beginning on the first day compliance is required under Sec. 63.7283, you must demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in Sec. 63.7296(a) by meeting the requirements in paragraphs (e)(1) and (2) of this section:

(1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking; and

(2) Operating and maintaining a COMS and collecting and reducing the COMS data according to Sec. 63.7331(i).

(f) Beginning on the first day compliance is required under Sec. 63.7283, you must demonstrate continuous compliance with the TDS limit

for quenching in Sec. 63.7295(a)(1)(i) by meeting the requirements in paragraphs (f)(1) and (2) of this section:

(1) Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less; and

(2) Determining the TDS content of the quench water at least weekly according to the requirements in Sec. 63.7325(a) and recording the sample results.

(g) Beginning on the first day compliance is required under Sec. 63.7283, you must demonstrate continuous compliance with the constituent limit for quenching in Sec. 63.7295(a)(1)(ii) by meeting the requirements in paragraphs (g)(1) and (2) of this section:

(1) Maintaining the sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and

(2) Determining the sum of the constituent concentrations at least monthly according to the requirements in Sec. 63.7325(c) and recording the sample results.

Sec. 63.7334 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in Sec. 63.7291(a), you must demonstrate continuous compliance according to the requirements of paragraphs (a)(1) through (8) of this section:

(1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by Sec. 63.7291(a)(3). Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to Sec. 63.7291(a)(4).

(2) Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in paragraphs (a)(1) through (8) of this section.

(3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in appendix A to 40 CFR part 60 using a Method 9 certified observer unless you have an approved alternative procedure under paragraph (a)(7) of this section.

(4) Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (appendix A to 40 CFR part 60). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in Sec. 63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

(5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (e.g., as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

(6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

(i) For a battery without a cokeside shed, observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.

(ii) For a battery with a cokeside shed, the observer must be in a position that provides an unobstructed view and avoids interferences from the topside of the battery. Typical interferences to avoid include emissions from open standpipes and charging. Observations must include any fugitive emissions that escape from the top of the shed, from the ends of the shed, or from the area where the shed is joined to the battery. If the observer does not have a clear view to identify when a push starts or ends, a second person can be positioned to signal the start or end of the push and notify the observer when to start or end the observations. Radio communications with other plant personnel (e.g., pushing ram operator or quench car operator) may also serve to notify the observer of the start or end of a push. Record the oven number of any push not observed because of obstructions or interferences.

(iii) You may reposition after the push to observe emissions during travel if necessary.

(7) If it is infeasible to implement the procedures in paragraphs (a)(1) through (6) of this section for an oven due to physical

obstructions, nighttime pushes, or other reasons, you may apply to your permitting authority for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in paragraphs (a)(1) through (6) of this section, identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

(8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, you must take corrective action and/or increase the coking time in accordance with Sec. 63.7291(a). Maintain records documenting conformance with the requirements in Sec. 63.7291(a).

(b) For each by-product coke oven battery with horizontal flues subject to the work practice standards for fugitive pushing emissions in Sec. 63.7292(a), you must demonstrate continuous compliance by having met the requirements of paragraphs (b)(1) through (3) of this section:

(1) Measuring and recording the temperature of all flues on two ovens per day within 2 hours before the oven's scheduled pushing time and ensuring that the temperature of each oven is measured and recorded at least once every month;

(2) Recording the time each oven is charged and pushed and calculating and recording the net coking time for each oven; and

(3) Increasing the coking time for each oven that falls below the minimum flue temperature trigger established for that oven's coking time in the written plan required in Sec. 63.7292(a)(1), assigning the oven to the oven-directed program, and recording all relevant information according to the requirements in Sec. 63.7292(a)(4) including, but not limited to, daily pushing schedules, diagnostic procedures, corrective actions, and oven repairs.

(c) For each non-recovery coke oven battery subject to the work practice standards in Sec. 63.7293(a), you must demonstrate continuous compliance by maintaining records that document each visual inspection of an oven prior to pushing and that the oven was not pushed unless there was no smoke in the open space above the coke bed and there was an unobstructed view of the door on the opposite side of the oven.

(d) For each by-product coke oven battery subject to the work practice standard for soaking in Sec. 63.7294(a), you must demonstrate continuous compliance by maintaining records that document conformance with requirements in Sec. 63.7294(a)(1) through (5).

(e) For each coke oven battery subject to the work practice standard for quenching in Sec. 63.7295(b), you must demonstrate

continuous compliance according to the requirements of paragraphs (e)(1) through (3) of this section:

(1) Maintaining baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in Sec. 63.7295(b)(1);

(2) Maintaining records that document conformance with the washing, inspection, and repair requirements in Sec. 63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed; and

(3) Maintaining records of the source of makeup water to document conformance with the requirement for acceptable makeup water in Sec. 63.7295(a)(2).

Sec. 63.7335 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each by-product coke oven battery, you must demonstrate continuous compliance with the operation and maintenance requirements in Sec. 63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.

(b) For each coke oven battery with a capture system or control device applied to pushing emissions, you must demonstrate continuous compliance with the operation and maintenance requirements in Sec. 63.7300(c) by meeting the requirements of paragraphs (b)(1) through (3) of this section:

(1) Making monthly inspections of capture systems according to Sec. 63.7300(c)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to Sec. 63.7300(c)(2) and recording all information needed to document conformance with these requirements; and

(3) Initiating and completing corrective action for a bag leak detection system alarm according to Sec. 63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.

(c) To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in Sec. 63.7331(a), you must inspect and maintain each baghouse according to the requirements in Sec. 63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If you increase or decrease the

sensitivity of the bag leak detection system beyond the limits specified in Sec. 63.7331(a)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(d) You must maintain a current copy of the operation and maintenance plans required in Sec. 63.7300(b) and (c) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

Sec. 63.7336 What other requirements must I meet to demonstrate continuous compliance?

(a) Deviations. You must report each instance in which you did not meet each emission limitation in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation and maintenance requirement in this subpart that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in Sec. 63.7341.

(b) Startup, shutdowns, and malfunctions. During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

(1) Consistent with Sec. Sec. 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan.

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in Sec. 63.6(e).

Notification, Reports, and Records

Sec. 63.7340 What notifications must I submit and when?

(a) You must submit all of the notifications in Sec. Sec. 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in Sec. 63.9(b)(2), if you startup your affected source before April 14, 2003, you must submit your initial notification no later than August 12, 2003.

(c) As specified in Sec. 63.9(b)(3), if you startup your new

affected source on or after April 14, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in Sec. 63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to Sec. 63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test according to Sec. 63.10(d)(2).

(f) For each by-product coke oven battery with horizontal flues, you must notify the Administrator (or delegated authority) of the date on which the study of flue temperatures required by Sec. 63.7292(a)(3) will be initiated. You must submit this notification no later than 7 days prior to the date you initiate the study.

Sec. 63.7341 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit quarterly compliance reports for battery stacks and semiannual compliance reports for all other affected sources to your permitting authority according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.7283 and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.

(2) The first semiannual compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.7283 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source. 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.

(3) All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. All semiannual compliance reports 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.

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

(b) Quarterly compliance report contents. Each quarterly report must provide information on compliance with the emission limitations for battery stacks in Sec. 63.7296. The reports must include the information in paragraphs (c)(1) through (3), and as applicable, paragraphs (c)(4) through (8) of this section.

(c) Semiannual compliance report contents. Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in paragraphs (c)(1) through (3) of this section, and as applicable, paragraphs (c)(4) through (8) of this section.

(1) Company name and address.

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

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

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

(5) If there were no deviations from the continuous compliance requirements in Sec. 63.7333(e) for battery stacks, a statement that there were no deviations from the emission limitations during the reporting period. If there were no deviations from the continuous compliance requirements in Sec. Sec. 63.7333 through 63.7335 that apply to you (for all affected sources other than battery stacks), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements

during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in Sec. 63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in this subpart (including quench water limits) and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(4) and (7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

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

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

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (c)(4) and (8)(i) through (xii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in Sec. 63.8(c)(8).

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

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

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

(vii) A summary of the total duration of continuous monitoring

system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) An identification of each HAP that was monitored at the affected source.

(ix) A brief description of the process units.

(x) A brief description of the continuous monitoring system.

(xi) The date of the latest continuous monitoring system certification or audit.

(xii) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(d) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in Sec. 63.10(d)(5)(ii).

(e) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements to your permitting authority.

Sec. 63.7342 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).

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

(3) Records of performance tests, performance evaluations, and opacity observations as required in Sec. 63.10(b)(2)(viii).

(b) For each COMS or CEMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

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

(2) Monitoring data for COMS during a performance evaluation as required in Sec. 63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in Sec. 63.8(d)(3).

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

(c) You must keep the records in Sec. 63.6(h)(6) for visual observations.

(d) You must keep the records required in Sec. Sec. 63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.

Sec. 63.7343 In what form and how long must I keep my records?

(a) You must keep your records in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).

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

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

Other Requirements and Information

Sec. 63.7350 What parts of the General Provisions apply to me?

Table 1 to this subpart shows which parts of the General Provisions in Sec. Sec. 63.1 through 63.15 apply to you.

Sec. 63.7351 Who implements and enforces this subpart?

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

agency.

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

(c) The authorities in paragraphs (c)(1) through (6) of this section will not be delegated to State, local, or tribal agencies.

(1) Approval of alternatives to work practice standards for fugitive pushing emissions in Sec. 63.7291(a) for a by-product coke oven battery with vertical flues, fugitive pushing emissions in Sec. 63.7292(a) for a by-product coke oven battery with horizontal flues, fugitive pushing emissions in Sec. 63.7293 for a non-recovery coke oven battery, soaking for a by-product coke oven battery in Sec. 63.7294(a), and quenching for a coke oven battery in Sec. 63.7295(b) under Sec. 63.6(g).

(2) Approval of alternative opacity emission limitations for a by-product coke oven battery under Sec. 63.6(h)(9).

(3) Approval of major alternatives to test methods under Sec. 63.7(e)(2)(ii) and (f) and as defined in Sec. 63.90, except for alternative procedures in Sec. 63.7334(a)(7).

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

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

(6) Approval of the work practice plan for by-product coke oven batteries with horizontal flues submitted under Sec. 63.7292(a)(1).

Sec. 63.7352 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in Sec. 63.2, and in this section as follows:

Acceptable makeup water means surface water from a river, lake, or stream; water meeting drinking water standards; storm water runoff and production area clean up water except for water from the by-product recovery plant area; process wastewater treated to meet effluent limitations guidelines in 40 CFR part 420; water from any of these sources that has been used only for non-contact cooling or in water seals; or water from scrubbers used to control pushing emissions.

Backup quench station means a quenching device that is used for less than 5 percent of the quenches from any single coke oven battery in the 12-month period from July 1 to June 30.

Baffles means an apparatus comprised of obstructions for checking or deflecting the flow of gases. Baffles are installed in a quench tower to remove droplets of water and particles from the rising vapors

by providing a point of impact. Baffles may be installed either inside or on top of quench towers and are typically constructed of treated wood, steel, or plastic.

Battery stack means the stack that is the point of discharge to the atmosphere of the combustion gases from a battery's underfiring system.

Batterywide extended coking means increasing the average coking time for all ovens in the coke oven battery by 25 percent or more over the manufacturer's specified design rate.

By-product coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas from which by-products are recovered.

By-product recovery plant area means that area of the coke plant where process units subject to subpart L in part 61 are located.

Coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.

Coke plant means a facility that produces coke from coal in either a by-product coke oven battery or a non-recovery coke oven battery.

Cokeside shed means a structure used to capture pushing emissions that encloses the cokeside of the battery and ventilates the emissions to a control device.

Coking time means the time interval that starts when an oven is charged with coal and ends when the oven is pushed.

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

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

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

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

Emission limitation means any emission limit, opacity limit, or operating limit.

Four consecutive pushes means four pushes observed successively.

Fugitive pushing emissions means emissions from pushing that are not collected by a capture system.

Horizontal flue means a type of coke oven heating system used on Semet-Solvay batteries where the heating flues run horizontally from

one end of the oven to the other end, and the flues are not shared with adjacent ovens.

Hot water scrubber means a mobile scrubber used to control pushing emissions through the creation of an induced draft formed by the expansion of pressurized hot water through a nozzle.

Increased coking time means increasing the charge-to-push time for an individual oven.

Non-recovery coke oven battery means a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

Oven means a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.

Pushing means the process of removing the coke from the oven. Pushing begins with the first detectable movement of the coke mass and ends when the quench car enters the quench tower.

Quenching means the wet process of cooling (wet quenching) the hot incandescent coke by direct contact with water that begins when the quench car enters the quench tower and ends when the quench car exits the quench tower.

Quench tower means the structure in which hot incandescent coke in the quench car is deluged or quenched with water.

Remove from service means that an oven is not charged with coal and is not used for coking. When removed from service, the oven may remain at the operating temperature or it may be cooled down for repairs.

Responsible official means responsible official as defined in Sec. 63.2.

Short battery means a by-product coke oven battery with ovens less than five meters in height.

Soaking means that period in the coking cycle that starts when an oven is dampered off the collecting main and vented to the atmosphere through an open standpipe prior to pushing and ends when the coke begins to be pushed from the oven.

Soaking emissions means the discharge from an open standpipe during soaking of visible emissions due to either incomplete coking or leakage into the standpipe from the collecting main.

Standpipe means an apparatus on the oven that provides a passage for gases from an oven to the atmosphere when the oven is dampered off the collecting main and the standpipe cap is opened. This includes mini-standpipes that are not connected to the collecting main.

Tall battery means a by-product coke oven battery with ovens five meters or more in height.

Vertical flue means a type of coke oven heating system in which the heating flues run vertically from the bottom to the top of the oven, and flues are shared between adjacent ovens.

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

As required in Sec. 63.7350, you must comply with each applicable requirement of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in Table 1 to Subpart CCCCC of Part 63. Applicability of General Provisions to Subpart CCCCC.

Attachment B

AK Steel
Ohio EPA Premise Number: 1409010006

40 CFR Part 63 Subpart FFFFF--National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Sec. 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

Sec. 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

Sec. 63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).

(d) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the

definition of reconstruction in Sec. 63.2.

Sec. 63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you no later than May 22, 2006.

(b) If you have a new affected source and its initial startup date is on or before May 20, 2003, then you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by May 20, 2003.

(c) If you have a new affected source and its initial startup date is after May 20, 2003, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in Sec. 63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations

Sec. 63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the

minimum levels established during the initial performance test.

(3) For each electrostatic precipitator applied to emissions from a BOPF, you must maintain the average opacity of emissions for each 6-minute period at or below the site-specific opacity value corresponding to the 99 percent upper confidence limit on the mean of a normal distribution of average opacity values established during the initial performance test.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with Sec. 63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in Sec. 63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

(d) For each sinter plant, you must either:

(1) Maintain the 30-day rolling average oil content of the feedstock at or below 0.02 percent; or

(2) Maintain the 30-day rolling average of volatile organic compound emissions from the windbox exhaust stream at or below 0.2 lb/ton of sinter.

Operation and Maintenance Requirements

Sec. 63.7800 What are my operation and maintenance requirements?

(a) As required by Sec. 63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in Sec. 63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The

operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of Sec. 63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for bag leak detection systems. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are

not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions; and

(5) Procedures for determining and recording the daily sinter plant production rate in tons per hour.

General Compliance Requirements

Sec. 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in Sec. 63.2.

(b) During the period between the compliance date specified for your affected source in Sec. 63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in Sec. 63.6(e)(3).

Initial Compliance Requirements

Sec. 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must also conduct a performance test to demonstrate initial compliance with the 30-day rolling average operating limit for the oil content of the sinter plant feedstock in Sec. 63.7790(d)(1) or alternative limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in Sec. 63.7790(d)(2). You must conduct the performance tests within 180 calendar days after the compliance date that is specified in Sec.

63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in Sec. 63.7783.

(c) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than November 17, 2003 or no later than 180 days after startup of the source, whichever is later, according to Sec. 63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by November 17, 2006, or no later than 180 days after startup of the source, whichever is later, according to Sec. 63.7(a)(2)(ix).

Sec. 63.7821 When must I conduct subsequent performance tests?

You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit. For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

Sec. 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in Sec. 63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(c) For each sinter plant windbox exhaust stream, you must complete the requirements of paragraphs (c)(1) and (2) of this section:

(1) Follow the procedures in your operation and maintenance plan for measuring and recording the sinter production rate for each test run in tons per hour; and

(2) Compute the process-weighted mass emissions (Ep) for each test run using Equation 1 of section 63.7822.

(d) If you apply two or more control devices in parallel to emissions from a sinter plant discharge end or a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of section 63.7822.

(e) For a control device applied to emissions from a blast furnace casthouse, sample for an integral number of furnace tapping operations sufficient to obtain at least 1 hour of sampling for each test run.

(f) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent reblows. Continue sampling for each run for an integral number of primary oxygen blows.

(g) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (g)(1) and (2) of this section:

(1) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and

(2) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(h) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than

three stacks associated with a process.

Sec. 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in Sec. 63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter plant discharge end or a blast furnace casthouse:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages. For a blast furnace casthouse, make observations during tapping of the furnace. Tapping begins when the furnace is opened, usually by creating a hole near the bottom of the furnace, and ends when the hole is plugged.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals.

(2) For a new BOPF shop housing a bottom-blown BOPF:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(ii) Determine the highest and second highest sets of 6-minute block average opacities for each steel production cycle.

(3) For a new BOPF shop housing a top-blown BOPF:

(i) Determine the opacity of emissions according to the requirements for an existing BOPF shop in paragraphs (d)(1)(i) through (iii) of this section.

(ii) Determine the highest and second highest sets of 3-minute block average opacities for each steel production cycle.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

Sec. 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in Sec. 63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in Sec. 63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section.

(1) Using the continuous parameter monitoring system (CPMS) required in Sec. 63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) For an electrostatic precipitator subject to the operating limit in Sec. 63.7790(b)(3) for opacity, you must establish a site-

specific operating limit according to the procedures in paragraphs (c)(1) through (3) of this section.

(1) Using the continuous opacity monitoring system (COMS) required in Sec. 63.7830(d), measure and record the opacity of emissions from each control device stack during each run of the particulate matter performance test.

(2) Compute and record the 6-minute block average opacity from 36 or more data points equally spaced over each 6-minute period during the test runs.

(3) Determine, based on the 6-minute block averages, the opacity value corresponding to the 99 percent upper confidence limit on the mean of a normal distribution of average opacity values.

(d) You may change the operating limits for a capture system, venturi scrubber, or electrostatic precipitator if you meet the requirements in paragraphs (d)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (c) of this section for a control device or capture system.

(e) For each sinter plant subject to the operating limit for the oil content of the sinter plant feedstock in Sec. 63.7790(d)(1), you must demonstrate initial compliance according to the procedures in paragraphs (e)(1) through (3) of this section.

(1) Sample the feedstock at least three times a day (once every 8 hours), composite the three samples each day, and analyze the composited samples using Method 9071B, ``n-Hexane Extractable Material(HEM) for Sludge, Sediment, and Solid Samples," (Revision 2, April 1998). Method 9071B is incorporated by reference (see Sec. 63.14) and is published in EPA Publication SW-846 ``Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." Record the sampling date and time, oil content values, and sinter produced (tons/day).

(2) Continue the sampling and analysis procedure for 30 consecutive days.

(3) Each day, compute and record the 30-day rolling average using that day's value and the 29 previous daily values.

(f) To demonstrate initial compliance with the alternative operating limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in Sec. 63.7790(d)(2), follow the test methods and procedures in paragraphs (f)(1) through (5) of this

section.

(1) Determine the volatile organic compound emissions according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 25 to determine the mass concentration of volatile organic compound emissions (total gaseous nonmethane organics as carbon) from the sinter plant windbox exhaust stream stack.

(2) Determine volatile organic compound (VOC) emissions every 24 hours (from at least three samples taken at 8-hour intervals) using Method 25 in 40 CFR part 60, appendix A. Record the sampling date and time, sampling results, and sinter produced (tons/day).

(3) Compute the process-weighted mass emissions (Ev) each day using Equation 1 of section 63.7824.

(4) Continue the sampling and analysis procedure in paragraphs (f)(1) through (3) of this section for 30 consecutive days.

(5) Compute and record the 30-day rolling average of VOC emissions for each operating day.

(g) You may use an alternative test method to determine the oil content of the sinter plant feedstock or the volatile organic compound emissions from the sinter plant windbox exhaust stack if you have already demonstrated the equivalency of the alternative method for a specific plant and have received previous approval from the applicable permitting authority.

Sec. 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in Sec. 63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with Sec. 63.7824(a)(1).

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you have established appropriate site-specific operating limits and have a

record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with Sec. 63.7824(b); and

(4) For each electrostatic precipitator subject to the opacity operating limit in Sec. 63.7790(b)(3), you have established an appropriate site-specific operating limit and have a record of the opacity measurements made during the performance test in accordance with Sec. 63.7824(c).

(b) For each existing or new sinter plant subject to the operating limit in Sec. 63.7790(d)(1), you have demonstrated initial compliance if the 30-day rolling average of the oil content of the feedstock, measured during the initial performance test in accordance with Sec. 63.7824(e) is no more than 0.02 percent or the volatile organic compound emissions from the sinter plant windbox exhaust stream, measured during the initial performance test in accordance with Sec. 63.7824(f), is no more than 0.2 lb/ton of sinter produced.

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to Sec. 63.7840(e).

Sec. 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of Sec. 63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in Sec. 63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in Sec. 63.7831(a).

(b) For each control device subject to operating limits in Sec. 63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan

according to the requirements of Sec. 63.7800(b), including a preventative maintenance schedule and, if applicable, detailed descriptions of the procedures you use for corrective action for baghouses;

(2) Submitted a notification of compliance status according to the requirements in Sec. 63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in Sec. 63.7831(a).

Continuous Compliance Requirements

Sec. 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in Sec. 63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in Sec. 63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(2) If you use a flow measurement device to monitor the operating limit parameter for a sinter plant discharge end or blast furnace casthouse, you must monitor the hourly average rate (e.g., the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in Sec. 63.7832.

(3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (e.g., the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in Sec. 63.7832.

(b) For each baghouse applied to meet any particulate emission limit in Table 1 of this subpart, you must install, operate, and maintain a bag leak detection system according to Sec. 63.7831(f), monitor the relative change in particulate matter loadings according to the requirements in Sec. 63.7832, and conduct inspections at their specified frequencies according to the requirements in paragraphs

(b)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(3) Check the compressed air supply for pulse-jet baghouses each day.

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in Sec. 63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in Sec. 63.7832.

(d) For each electrostatic precipitator subject to the opacity operating limit in Sec. 63.7790(b)(3), you must install, operate, and maintain a COMS according to the requirements in Sec. 63.7831(h) and monitor the 6-minute average opacity of emissions exiting each control device stack according to the requirements in Sec. 63.7832.

(e) For each sinter plant subject to the operating limit in Sec. 63.7790(d), you must either:

(1) Compute and record the 30-day rolling average of the oil content of the feedstock for each operating day using the procedures in Sec. 63.7824(e); or

(2) Compute and record the 30-day rolling average of volatile organic compound emissions (lbs/ton of sinter) for each operating day using the procedures in Sec. 63.7824(f).

Sec. 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in Sec. 63.7830, you must develop and make available for inspection upon request by the permitting authority

a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (6) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of Sec. Sec. 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of Sec. 63.8(d); and

(6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of Sec. Sec. 63.10(c), (e)(1), and (e)(2)(i).

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in Sec. 63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse applied to meet any particulate emission limit in Table 1 of this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, ``Fabric Filter Bag Leak Detection Guidance," EPA-454/R-98-015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

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

(g) For each venturi scrubber subject to operating limits in Sec. 63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(h) For each electrostatic precipitator subject to the opacity operating limit in Sec. 63.7790(b)(3), you must install, operate, and maintain each COMS according to the requirements in paragraphs (h)(1) through (4) of this section.

(1) You must install, operate, and maintain each COMS according to Performance Specification 1 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to Sec. 63.8 and Performance Specification 1 in appendix B to 40 CFR part 60.

(3) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

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

Sec. 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as

specified in Sec. 63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Sec. 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in Sec. 63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in Sec. 63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in Sec. 63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) and (2) of this section:

(1) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm, the corrective action(s) taken, and the date on which corrective action was completed.

(2) Inspecting and maintaining each baghouse according to the requirements in Sec. 63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in Sec. 63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you must demonstrate continuous compliance by completing the requirements of paragraphs (d)(1) through (3) of this section:

(1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Operating and maintaining each venturi scrubber CPMS according to Sec. 63.7831(g) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to Sec. 63.7831(b) and recording all information needed to document conformance with these requirements.

(e) For each electrostatic precipitator subject to the site-specific opacity operating limit in Sec. 63.7790(b)(3), you must demonstrate continuous compliance by completing the requirements of paragraphs (e)(1) and (2) of this section:

(1) Maintaining the average opacity of emissions for each 6-minute period no higher than the site-specific limit established during the initial or subsequent performance test; and

(2) Operating and maintaining each COMS and reducing the COMS data according to Sec. 63.7831(h).

(f) For each new or existing sinter plant subject to the operating limit in Sec. 63.7790(d), you must demonstrate continuous compliance by either:

(1) For the sinter plant feedstock oil content operating limit in Sec. 63.7790(d)(1),

(i) Computing and recording the 30-day rolling average of the percent oil content for each operating day according to the performance test procedures in Sec. 63.7824(e);

(ii) Recording the sampling date and time, oil content values, and sinter produced (tons/day); and

(iii) Maintaining the 30-day rolling average oil content of the feedstock no higher than 0.02 percent.

(2) For the volatile organic compound operating limit in Sec. 63.7790(d)(2),

(i) Computing and recording the 30-day rolling average of volatile organic compound emissions for each operating day according to the performance test procedures in Sec. 63.7824(f);

(ii) Recording the sampling date and time, sampling values, and sinter produced (tons/day); and

(iii) Maintaining the 30-day rolling average of volatile organic compound emissions no higher than 0.2 lb/ton of sinter produced.

Sec. 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in Sec. 63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in Sec. 63.7800(b) by meeting the requirements of paragraphs (a)(1) through (3) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to Sec. 63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to Sec. 63.7800(b)(2) and recording all information needed to document conformance with these requirements; and

(3) Initiating and completing corrective action for a bag leak detection system alarm according to Sec. 63.7800(b)(4) and recording all information needed to document conformance with these requirements.

(b) You must maintain a current copy of the operation and maintenance plan required in Sec. 63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

Sec. 63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) Deviations. You must report each instance in which you did not meet each emission limitation in Sec. 63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in Sec. 63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in Sec. 63.7841.

(b) Startups, shutdowns, and malfunctions. During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

(1) Consistent with Sec. Sec. 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan.

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in Sec. 63.6(e).

Notifications, Reports, and Records

Sec. 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in Sec. Sec. 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in Sec. 63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(c) As specified in Sec. 63.9(b)(3), if you start your new affected source on or after May 20, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are referred to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in Sec. 63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to Sec. 63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to Sec. 63.10(d)(2).

Sec. 63.7841 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in Sec. 63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual

reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

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

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

(b) Compliance report contents. Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

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

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

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

(5) If there were no deviations from the continuous compliance requirements in Sec. Sec. 63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in Sec. 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in Sec. 63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

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

(ii) Information on the number, duration, and cause of deviations

(including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

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

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in Sec. 63.8(c)(7), including the information in Sec. 63.8(c)(8).

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

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

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

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in Sec. 63.10(d)(5)(ii).

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or

40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

Sec. 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of
compliance status that you submitte, according to the requirements in Sec. 63.10(b)(2)(xiv).

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

(3) Records of performance tests, performance evaluations, and opacity observations as required in Sec. 63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

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

(2) Monitoring data for a performance evaluation as required in Sec. 63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in Sec. 63.8(d)(3).

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

(c) You must keep the records required in Sec. 63.6(h)(6) for visual observations.

(d) You must keep the records required in Sec. Sec. 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

Sec. 63.7843 In what form and how long must I keep my records?

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

(b) As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement,

maintenance, corrective action, report, or record.

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

Other Requirements and Information

Sec. 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in Sec. Sec. 63.1 through 63.15 apply to you.

Sec. 63.7851 Who implements and enforces this subpart?

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

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

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under Sec. 63.6(h)(9).

(2) Approval of major alternatives to test methods under Sec. 63.7(e)(2)(ii) and (f) and as defined in Sec. 63.90, except for approval of an alternative method for the oil content of the sinter plant feedstock or volatile organic compound measurements for the sinter plant windbox exhaust stream stack as provided in Sec. 63.7824(g).

(3) Approval of major alternatives to monitoring under Sec. 63.8(f) and as defined in Sec. 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under Sec. 63.10(f) and as defined in Sec. 63.90.

Sec. 63.7852 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in Sec. 63.2, and in this section as follows.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on tribroelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

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

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is

included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (e.g., an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in Sec. 63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions

from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

As required in Sec. 63.7790(a), you must comply with each applicable emission and opacity limit in Table 1 to Subpart FFFFF of Part 63.-Emission and Opacity Limits.

As required in Sec. 63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according Table 2 to Subpart FFFFF of Part 63.-Initial Compliance with Emission and Opacity Limits.

As required in Sec. 63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according Table 3 to Subpart FFFFF of Part 63.-Continuous Compliance with Emission and Opacity Limits.

As required in Sec. 63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in Table 4 to Subpart FFFFF of Part 63.--Applicability of General Provisions to Subpart FFFFF.