



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

13-18-00-1613
ISG Cleveland Inc
Richard M. Zavoda
3060 Eggers Avenue
Cleveland, OH 44105

Dear Richard M. Zavoda:

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 Cleveland Division of Air Pollution Control 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 Cleveland Division of Air Pollution Control.

Sincerely,


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

cc: USEPA (electronically submitted)
File, DAPC PMU
Cleveland Division of Air Pollution Control
Pennsylvania



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: 13-18-00-1613 to:
ISG Cleveland Inc
3060 Eggers Avenue
Cleveland, OH 44105

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units like B001 (Boiler A), F001 (Roadways and Parking Lots), and F204 (Materials Handling - C1 Blast Furnace).

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.

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:

Cleveland Division of Air Pollution Control
1925 St. Clair
Cleveland, OH 44114
(216) 664-2324

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

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

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

4. Title IV Provisions

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

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

5. Severability Clause

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

depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

7. Fees

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

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

8. Marketable Permit Programs

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

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

9. Reasonably Anticipated Operating Scenarios

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

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

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

11. Federal and State Enforceability

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

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

12. Compliance Requirements

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

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.
(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

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

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

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

14. Operational Flexibility

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

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

15. Emergencies

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

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

16. Off-Permit Changes

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

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

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

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

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

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

17. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

18. Insignificant Activities

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

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

19. Permit to Install Requirement

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

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

20. Air Pollution Nuisance

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

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

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

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

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1.a OAC rule 3745-15-06 Malfunction of equipment; scheduled maintenance; reporting.

[Ohio Effective Date: 01/25/80 USEPA Approved: 11/01/82]

(A) Scheduled maintenance of air pollution control equipment shall be conducted according to the following:

(1) For the purposes of this rule, maintenance of air pollution control equipment which is scheduled to prevent a malfunction which would occur within two weeks if the maintenance were not performed shall be considered to be a malfunction and shall be subject to the provisions of paragraph (B) of this rule.

(2) Except as otherwise indicated in paragraph (A)(3) of this rule, scheduled maintenance of air pollution control equipment, that requires the shutdown or bypassing of said equipment, must be accompanied by the shutdown of the associated air pollution sources.

(3) In cases where a complete source shutdown may result in damage to the air pollution sources or is otherwise impossible or impractical, the owner or operator may request authorization to continue operating the sources during the scheduled maintenance of air pollution control equipment. Any such request shall be made in a written report at least two weeks prior to the planned shutdown of the air pollution control equipment. The director shall authorize the shutdown of the air pollution control equipment if, in his judgment, the situation justifies continued operation of the sources. Any written report submitted pursuant to this paragraph shall contain the following:

(a) Identification and location of the specific source for which air pollution control equipment will be taken out of service. The identification shall include the Ohio Environmental Protection Agency permit application number;

(b) The expected length of time that the air pollution control equipment will be taken out of service;

(c) The nature and estimated quantity of emissions of air contaminants which are likely to occur during the shutdown period;

1.b (d) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;

(e) The reasons that it will be impossible or impractical to shut down the source operation during the scheduled maintenance period; and

(f) A demonstration that all feasible interim control measures will be taken to reduce emissions from the source during the shutdown period.

(B) Malfunctions of air pollution control equipment shall be reported as follows:

(1) In the event that any emission source, air pollution control equipment, or related facility breaks down in such a manner as to cause the emission of air contaminants in violation of any applicable law, the person responsible for such equipment shall immediately notify the Ohio Environmental Protection Agency district office or delegate agency of such failure or breakdown. If the malfunction continues for more than seventy-two hours, the source owner or operator shall provide a written statement to the director within two weeks of the date the malfunction occurred. The immediate notification and written statement shall include the following data:

(a) Identification and location of such equipment including the Ohio Environmental Protection Agency permit application number for each air contaminant source;

(b) The estimated or actual duration of breakdown;

(c) The nature and estimated quantity of air contaminants which have been or may be emitted into the ambient air during the breakdown period;

(d) Statements demonstrating that:

(i) Shutdown or reduction of source operation during the breakdown period will be or would have been impossible or impractical;

(ii) The estimated breakdown period will be or was reasonable in duration based on installation or repair time, delivery dates of equipment, replacement parts, or materials, or current unavailability of essential equipment, parts, or materials;

A. State and Federally Enforcable Section (continued)

- 1.c** (iii) Available alternative operating procedures and interim control measures will be or have been implemented during the breakdown period to reduce adverse effects on public health or welfare; and
(iv) All actions necessary and required by any applicable preventive maintenance and malfunction abatement plan will be or have been implemented.
- (2) The Ohio Environmental Protection Agency district office or delegate agency shall be notified when the condition causing the failure or breakdown has been corrected and the equipment is again in operation. Notification of the correction of the condition causing the failure or breakdown may be given verbally if the duration of the malfunction is seventy-two hours or less. Otherwise, such notification shall be in writing.
- (3) Within two months following a failure or breakdown which exceeded seventy-two hours in duration, the owner or operator of such equipment shall prepare and submit a detailed report which identifies a program to prevent, detect and correct, as expeditiously as practicable, similar future failures or breakdowns of such equipment.
- (C) The director retains the responsibility to evaluate any report submitted pursuant to this rule. The director shall take appropriate action upon a determination that the reporting requirements of this rule have not been satisfied, that the equipment was not properly operated and maintained prior to breakdown, that shutdown of the source or operation during the period of maintenance or breakdown was or has become practicable, that the shutdown or breakdown was or has become avoidable, or was induced or prolonged in bad faith, or that the emissions endanger or tend to endanger the health or safety of the public.
- (D) If, in the judgment of the director, excessive or unduly prolonged malfunctions of any emission source, air pollution control equipment or related facility have occurred, the director may require the owner or
- 1.d** of said source, equipment or related facility to prepare, submit and implement a preventive maintenance and malfunction abatement plan which is acceptable to the director. Such plan shall be designed to prevent, detect and correct malfunctions or equipment failures which could result in emissions exceeding any applicable law.
- (1) Each preventive maintenance and malfunction abatement plan shall be in writing and specify the following:
- (a) A comprehensive preventive maintenance program, including a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of the replacement parts which will be maintained in inventory for quick replacement;
- (b) An identification of the source and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and
- (c) A description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law as expeditiously as practicable.
- (2) Any acceptable preventive maintenance and malfunction abatement plan shall be specified in the terms and conditions of any permit or variance issued for a source covered by such plan.
- (3) Operation and maintenance records shall be maintained by the owner or operator of the source to demonstrate that any preventive maintenance and malfunction abatement plan is fully implemented. All such records shall be maintained for a minimum of two years and shall be subject to inspection by the director or his representative upon request.

A. State and Federally Enforcable Section (continued)

2.a Although the standard governing the control of visible emissions is listed as an applicable requirement for emission units, the permittee believes that such a standard should not be considered an applicable requirement and therefore the permittee reserves its right to challenge this requirement at a later date. The permittee claims that Federal and Ohio state courts have indicated that the opacity standard is not an independently enforceable standard (see e.g., US vs New Boston Coke Corp., Portland Cement Ass'n v. Ruckleshaus, Dayton-Walther v. Williams). It concludes opacity is not federally enforceable, and cannot constitute an applicable requirement.

OAC 3745-17-07 Control of visible particulate emissions from stationary sources.

(B) Visible particulate emission limitations for fugitive dust:

(1) Except as provided in paragraphs (B)(2) to (B)(7) of this rule, visible particulate emissions from any fugitive dust source shall not exceed twenty per cent opacity as a three-minute average.

(2) Visible particulate emissions from the fugitive dust sources associated with a coke oven battery.

(3) Visible particulate emissions of fugitive dust from electric arc furnace shop roof monitors, argon-oxygen decarburization shop roof monitors, blast furnace casthouses and sintering operations shall not exceed twenty per cent opacity as a six-minute average.

(4) There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty-minute observation period.

(5) There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period.

(6) There shall be no visible particulate emissions from any material storage piles except for a period of time not to exceed thirteen minutes during any sixty-minute observation period.

2.b (7) The visible particulate emission limitations specified in paragraphs (B)(1) to (B)(6) of this rule shall not apply to the following:

(a) Ship loading spouts at grain terminals;

(b) Blasting at mineral extraction operations;

(c) Blowing taps, poling and oxygen lancing of the tap hole and casting operations associated with ferroalloy electric arc furnaces;

(d) Any fugitive dust source which is exempted from the requirements of paragraph (B) of rule 3745-17-08 of the Administrative Code;

(e) Any fugitive dust source which is not located within the geographical areas specified in Appendix A of rule 3745-17-08 of the Administrative Code, unless the director, in accordance with paragraph (A)(2) of rule 3745-17-08 of the Administrative Code, requires the owner or operator to submit and implement a control program which will bring the fugitive dust source into compliance with the requirements of paragraph (B) of rule 3745-17-08 of the Administrative Code; and

(f) The malfunction of any air contaminant source or the malfunction/shutdown of air pollution control equipment associated with any air contaminant source, if the owner or operator of said air contaminant source or air pollution control equipment complies with the requirements of rule 3745-15-06 of the Administrative Code and none of the conditions listed in paragraph (C) of rule 3745-15-06 of the Administrative Code exists.

(8) It shall be deemed not to be a violation of this rule where the presence of uncombined water is the only reason for failure of a fugitive dust emission to meet the requirements of this rule.

A. State and Federally Enforcable Section (continued)

3.a OAC 3745-25-03 Emission Control Action Programs.

[Ohio Effective Date: 12/15/78 USEPA Approved: 12/29/80]

(A) Any person responsible for the operation of a source of air contaminants which emits 0.25 tons per day or more of air contaminants for which air quality standards have been adopted shall prepare emission control action programs, consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the ambient air during periods of an air pollution "Alert", air pollution "Warning", and air pollution "Emergency". Emission control action programs shall be designed to reduce or eliminate emissions of air contaminants into the ambient air in accordance with the objectives set forth in tables 1 to 5 of Chapter 374345-25 of the Administrative Code.

(B) Emission control action programs required by paragraph (a) of this rule shall be in writing and show the source of air contamination, the approximate amount of reduction of contaminants, the approximate time required to effect the program, a brief description of the manner in which the reduction will be achieved during each stage of an air pollution episode, and such other information as the director shall deem pertinent.

(C) Emission control action programs shall be filed with the director at the following times:

(1) Existing sources - shall file not later than six months after adoption of these rules;

(2) New sources - shall file with application for permit to operate.

(D) During a condition of an air pollution "Alert" air pollution "Warning", and air pollution "Emergency" emission control action programs required by paragraph (a) of this rule shall be made available on the premises to any person authorized to enforce the provisions of the emergency procedure.

(E) Emission control action programs required by paragraph (a) of this rule shall be submitted to the director upon request within thirty days of the rece

3.b ipt of such request; such emission control action programs shall be subject to review and approval by the director. If, in the opinion of the director, such emission control action programs do not effectively carry out the objectives as set forth in tables 1 to 5 of chapter 3745-25 of the Administrative Code, the director may disapprove said emission control action programs, state his reason for disapproval and order the preparation of amended emission control action programs within the time period specified in the order.

4.a Although the standard governing the control of visible emissions is listed as an applicable requirement for emission units, the facility believes that such a standard should not be considered an applicable requirement and therefore the facility reserves its right to challenge this requirement at a later date. Federal and Ohio state courts have indicated that the opacity standard is not an independently enforceable standard. (See e.g. US vs New Boston Coke Corp., Portland Cement Ass'n v. Ruckleshaus, Dayton-Walther v. Williams) Since opacity is not federally enforceable, it cannot constitute an applicable requirement.

OAC 3745-17-07 Control of visible particulate emissions from stationary sources

(A) Visible particulate emission limitations for stack emissions:

(1) General limitations:

(a) Except as otherwise specified in paragraphs (A)(1)(b), (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average.

(b) Except as otherwise specified in paragraphs (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack may exceed twenty per cent opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed sixty percent opacity, as a six-minute average, at any time.

(2) It shall be deemed not to be a violation of this rule where the presence of uncombined water is the only reason for failure of a stack emission to meet the requirements of this rule.

(3) The visible particulate emission limitations established in paragraph (A)(1) of this rule shall not apply to the following:

(a) The start-up of the following fuel burning equipment:

(i) For any fuel burning equipment which are equipped with baghouses or electrostatic precipitators, until the exhaust gases have achieved a perature of two hundred fifty degrees Fahrenheit at the inlet of the baghouses or electrostatic precipi

A. State and Federally Enforcable Section (continued)

4.b tators, provided that the director may incorporate a higher start-up temperature in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the higher temperature is needed for safety considerations or to prevent damage to the control equipment; and
(ii) For any fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, for a period of not more than three hours from the moment of start-up, provided that the director may incorporate a longer start-up time period in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the longer time period is required.

(b) The shutdown of the following fuel burning equipment:

(i) For any fuel burning equipment which are equipped with baghouses or electrostatic precipitators, after the temperature of the exhaust gases has dropped below two hundred fifty degrees Fahrenheit at the inlet of the baghouses or electrostatic precipitators, provided that the director may incorporate a higher shutdown temperature in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the higher temperature is needed for safety considerations or to prevent damage to the control equipment; and

(ii) For any fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with stream separators or similar devices) for the control of particulate emissions, for a period of not more than three hours, provided that the director may incorporate a longer shutdown time period in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the l

4.c onger time period is required.

(c) The malfunction of any air contaminant source or the malfunction/shutdown of air pollution control equipment associated with any air contaminant source, if the owner or operator of said air contaminant source or air pollution control equipment complies with the requirements of rule 3745-15-06 of the Administrative Code and none of the conditions listed in paragraph (C) of rule 3745-15-06 of the Administrative Code exists;

(d) Intermittent soot-blowing operations (the cleaning of heat transfer surfaces with pressurized air or steam) for fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, provided that the owner or operator of such fuel burning equipment maintains a daily record which clearly documents the date, beginning time and ending time for all intermittent soot-blowing operations;

(e) Salt glazing operations conducted in a gas-fired periodic brick or tile kiln, for a period of not more than two hours during any twenty-one consecutive days of operation of said kiln;

(f) Intermittent ash removal operations (the dumping or pulling of ash) for fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, provided that the owner or operator of such fuel burning equipment maintains a daily record which clearly documents the date, beginning time and ending time for all intermittent ash removal operations;

(g) The commencement of increased coal firing from a banked condition for fuel burning equipment, for a period not to exceed thirty minutes;

(h) Any air contaminant source which is not subject to the requirements of paragraphs

4.d (B)(3) and (B)(4) of rule 3745-17-08 of the Administrative Code, or rule 3745-17-09, 3745-17-10 or 3745-17-11 of the Administrative Code; and

(i) Any air contaminant source for which an equivalent visible particulate emission limitation has been established by the director pursuant to paragraph (C) of this rule.

B. State Only Enforceable Section

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

F004 Blast Furnace Storage Piles
G001 Mobile Repair Shop - East Gasoline dispensing facility
G004 Basic Oxygen Furnace #2 Gasoline dispensing facility
G005 Upper Dock Gasoline dispensing facility
G201 Strip Mill - West Gasoline dispensing facility
P001 L-S Electroplating - Chemical Plant [Electrolytic Solution Plant]
P003 L-S Electroplating - Raw materials handling
P065 Shot Blast cleaning
P205 Anneal furnaces (see P224-P231) - shut down
P206 Anneal furnaces (see P232-P245) - shut down
P207 Anneal furnaces (see P246-P256) - shut down
P224 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down
P225 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down
P226 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down
P227 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down
P228 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down
P229 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down
P230 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down
P231 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson - shut down

1.b P232 Swindell-Dressler (No. 1) - shut down
P233 Swindell-Dressler (No. 2) - shut down
P234 Swindell-Dressler (No. 3) - shut down
P235 Swindell-Dressler (No. 4) - shut down
P236 Swindell-Dressler (No. 5) - shut down
P237 Swindell-Dressler (No. 6) - shut down
P238 Swindell-Dressler (No. 7) - shut down
P239 Swindell-Dressler (No. 8) - shut down
P240 Swindell-Dressler (No. 9) - shut down
P241 Swindell-Dressler (No. 10) - shut down
P242 Swindell-Dressler (No. 11) - shut down
P243 Swindell-Dressler (No. 12) - shut down
P244 Swindell-Dressler (No. 13) - shut down
P245 Swindell-Dressler (No. 14) - shut down
P246 Surface Combustion (No. 15) - shut down
P247 Surface Combustion (No. 16) - shut down
P248 Surface Combustion (No. 17) - shut down
P249 Surface Combustion (No. 18) - shut down
P250 Surface Combustion (No. 19) - shut down
P251 Surface Combustion (No. 20) - shut down
P252 Surface Combustion (No. 21) - shut down
P253 Surface Combustion (No. 22) - shut down
P254 Surface Combustion (No. 23) - shut down
P255 Surface Combustion (No. 24) - shut down
P256 Surface Combustion (No. 25) - shut down
P260 80" pickling line - shut down
P263 #2 - (5.125 Million BTU/hour) Batch Annealing Furnace - Lee Wilson #43

B. State Only Enforceable Section (continued)

- 1.c**
- T001 L-S Electrogalvanizing - (12,000 gallon 94%) Sulfuric Acid Tank
 - T002 L-S Electrogalvanizing - (12,000 gallon 50%) Caustic Tank
 - T003 L-S Electrogalvanizing - Oil Tanks [Rust Preventive Oil Storage Tank]
 - T013 50,000 gallon #2 Fuel Oil Tank T - 463 - East
 - T014 50,000 gallon #2 Fuel Oil Tank T - 464 - East
 - T015 50,000 gallon #2 Fuel Oil Tank T - 465 - East
 - T032 125,000 gallon #6 Fuel Oil Tank T - 851 - East
 - T037 250,000 gallon #6 Fuel Oil Tank T - 351 - East
 - T038 250,000 gallon #6 Fuel Oil Tank T - 971 - East
 - T039 11,000,000 gallon #6 Fuel Oil Tank T - 855 - East
 - T040 20,000 gallon #6 Fuel Oil Tank T - 361 - East
 - T041 17,625 gallon #6 Fuel Oil Tank T - 362 - East
 - T201 3,133,000 gallon #6 Fuel Oil Tank #4
 - T202 1,380,000 gallon #6 Fuel Oil Tank #3
 - T203 5,500,000 gallon #6 Fuel Oil Tank #5
 - T205 DHCC (Direct Hot Charge Complex) (Continuous Caster Hydraulic) Oil Storage Tank - West
 - T206 DHCC (Direct Hot Charge Complex) (Continuous Caster) Grease Storage Tank - West
 - T207 Rust Preventive Oil Storage Tank - West
- 1.d**
- Z001 Blast Furnace C5 Gas cleaning
 - Z002 Blast Furnace C5 Natural gas suppression
 - Z003 Blast Furnace C5/C6 Cooling tower
 - Z004 Blast Furnace C5 Flue dust handling
 - Z005 Blast Furnace C5 Trough maintenance
 - Z006 Blast Furnace C5 Back Draft
 - Z008 77" tandem mill - shut down
 - Z011 Blast Furnace C5 Dirty gas bleeders
 - Z012 Blast Furnace C5 Clean gas bleeder
 - Z013 Blast Furnace C6 Flue dust handling
 - Z014 Blast Furnace C6 Trough maintenance
 - Z015 Blast Furnace C6 Flue dust handling
 - Z016 Blast Furnace C5/C6 Clarifiers
 - Z017 Blast Furnace C6 Back Draft
 - Z018 Blast Furnace C6 Dirty gas bleeders
 - Z019 Blast Furnace C6 Gas cleaning
 - Z020 Blast Furnace C6 Clean gas bleeder
 - Z021 Blast Furnace C6 Natural gas suppression
 - Z022 Blast Furnace C6 Gas cleaning
 - Z023 Blast Furnace C1 Trough maintenance
 - Z024 Blast Furnace C1 Back Draft stack
 - Z025 Blast Furnace C6 Cooling tower: Non-Contact Cooling Water
 - Z026 Blast Furnace C1 Natural gas suppression
 - Z027 Blast Furnace C1 Dirty gas bleeders
 - Z028 Blast Furnace C1 Clean gas bleeder
 - Z029 Blast Furnace C1 Gas cleaning
 - Z030 Blast Furnace C1 Flue dust handling

B. State Only Enforceable Section (continued)

- 1.e
 - Z031 Blast Furnace C1 Cooling tower
 - Z032 Blast Furnace C - 1 Clarifiers
 - Z033 Slab Conditioning
 - Z034 Basic Oxygen Furnace #1 electrostatic precipitator (ESP) dust handling
 - Z035 Basic Oxygen Furnace #1 Nozzle block baghouse
 - Z036 Basic Oxygen Furnace #1 Baghouse dust handling
 - Z037 Basic Oxygen Furnace #1 Ladle Metallurgy Facility baghouse dust handling
 - Z038 DHCC (Direct Hot Charge Complex) Scale pits
 - Z039 Basic Oxygen Furnace #1 Gradall excavator deskulling/debricking
 - Z040 Basic Oxygen Furnace #1 Oxygen lance cleaning
 - Z041 DHCC (Direct Hot Charge Complex) Continuous Caster tundish venting
 - Z042 Basic Oxygen Furnace #1 Additives handling
 - Z043 Miscellaneous Degreasers
 - Z044 Basic Oxygen Furnace #2 Baghouse dust handling
 - Z045 Basic Oxygen Furnace #2 Vacuum Degassing Facility baghouse dust handling
 - Z046 Basic Oxygen Furnace #2 Ladle Metallurgy Facility baghouse dust handling
 - Z047 #1 Continuous Caster Scale pits
 - Z048 Basic Oxygen Furnace #2 Gradall excavator deskulling/debricking
 - Z049 Basic Oxygen Furnace #2 oxygen lance cleaning
 - Z050 #1 Continuous Caster tundish venting
 - Z051 New Emissions unit - Materials unloading and handling - east side
 - Z052 Basic Oxygen Furnace #2 Additives handling
 - Z053 Steel Plant Wastewater Treatment Plant Clarifiers
 - Z054 Steel Plant Wastewater Treatment Plant Cooling tower
 - Z055 Finishing - East 84" Hot Mill Finishing stand
 - Z056 Finishing - East 84" Annealing Cooling tower - Non-Contact Cooling Water
 - Z057 Finishing - East 84" Pickle Line Welding
 - Z058 Finishing - East 84" Pickle Line Tension leveler Baghouse dust unloading
 - Z059 Finishing - East 84" Pickle Line Water rinse
 - Z060 Finishing - East 84" Pickle Line Natural gas strip dryer
- 1.f
 - Z061 Finishing - East 84" Pickle Line electrostatic oiler
 - Z062 Finishing - East Continuous Anneal Line Welding
 - Z063 Finishing - East Continuous Anneal Line Water rinse
 - Z064 Finishing - East Continuous Anneal Line Steam strip dryer
 - Z065 Finishing - East Continuous Anneal Line Cooling tower
 - Z066 Finishing - East Continuous Anneal Line Printer cleaning
 - Z067 Finishing - East 84" Temper Mill - Mill vent
 - Z068 Finishing - East 84" Temper Mill Electrostatic oiler
 - Z069 Finishing - East 84" Slitter
 - Z070 Finishing - East Free Standing Tension Leveler Welding
 - Z071 Finishing - East Free Standing Tension Leveler Caustic Tank
 - Z072 Finishing - East Free Standing Tension Leveler Electrostatic Oiler
 - Z073 Finishing - East 60" Electroplating - Welding
 - Z074 Finishing - East 60" Electroplating - Rinse tanks
 - Z075 Finishing - East 60" Electroplating - Electroplating cells
 - Z076 Finishing - East 60" Electroplating - Zinc phosphate bath
 - Z077 Finishing - East 60" Electroplating - Chromic acid bath
 - Z078 Finishing - East 60" Electroplating - Cooling tower
 - Z079 Finishing - East L-S Electrogalvanizing Floor cleaning
 - Z080 Finishing - East L-S Electrogalvanizing Parts cleaning
 - Z081 Finishing - East L-S Electrogalvanizing Zinc oxide slurry system
 - Z082 Finishing - East L-S Electrogalvanizing Evaporator system
 - Z083 Finishing - East L-S Electrogalvanizing Cooling tower - Non-Contact Cooling Water
 - Z084 Finishing - East Hot Mill Roll Shop Steaming cleaning
 - Z085 Finishing - East Hot Mill Roll Shop Grinder
 - Z086 Finishing - East Hot Mill Roll Shop Lathe
 - Z087 Finishing - East Cold Mill Roll Shop Grinding
 - Z088 Finishing - East Cold Mill Roll Shop Floor cleaning
 - Z089 Finishing - East Cold Mill Roll Shop Shotblasting
 - Z090 Finishing - East #4 Reinspect Line

B. State Only Enforceable Section (continued)

- 1.g** Z091 Finishing - East Strip Mill Wastewater Treatment Plant Lagoons
- Z092 Finishing - East Strip Mill Wastewater Treatment Plant Cooling tower
- Z093 Finishing - East Strip Mill Wastewater Treatment Plant Scale pits/clarifier
- Z094 Finishing - East Strip Mill Wastewater Treatment Plant Metals treatment plant
- Z095 Finishing - East Strip Mill Wastewater Treatment Plant Oily waste treatment plant
- Z096 Finishing - East Strip Mill Wastewater Treatment Plant Lime silo
- Z097 Finishing - West Walking Beam Relining
- Z098 Finishing - West Walking Beam Cooling towers
- Z099 Finishing - West Hot Mill Miscellaneous natural gas usage
- Z100 Finishing - West Hot Mill Scale pits
- Z101 Finishing - West Hot Mill Finishing stand
- Z102 Finishing - West 80" Pickle Welding - shut down
- Z103 Finishing - West 80" Pickle Rinse spray - shut down
- Z104 Finishing - West 80" Pickle Hot Water rinse - shut down
- Z105 Finishing - West 80" Pickle Oiler - shut down
- Z106 Finishing - West 56" Pickle Welding
- Z107 Finishing - West 56" Pickle Rinse spray
- Z108 Finishing - West 56" Pickle Hot Water rinse
- Z109 Finishing - West 56" Pickle Oiler
- Z110 Finishing - West 77" Tandem Mill Cooling tower - Non-Contact Cooling Water - shut down
- Z111 Finishing - West 84" Temper Mill Rolling Stands - shut down
- Z112 Finishing - West 84" Temper Mill Roller/sprayer oiler - shut down
- Z113 Finishing - West 77" Temper Mill Rolling Stands - shut down
- Z114 Finishing - West 77" Temper Mill Roller/sprayer oiler - shut down
- Z115 Finishing - West Hot Mill Roll Shop Steaming cleaning
- Z116 Finishing - West Hot Mill Roll Shop Grinder
- Z117 Finishing - West Hot Mill Roll Shop Lathe
- Z118 Finishing - West Cold Mill Roll Shop Grinder
- Z119 Finishing - West Cold Mill Roll Shop Roll cleaning
- Z120 Finishing - West Cold Mill Roll Shop Shotblasting

- 1.h** Z121 Finishing - West #2 Anneal Cooling tower - Non-Contact Cooling Water
- Z122 Central Wastewater Treatment Plant Soda ash silo
- Z123 Central Wastewater Treatment Plant Clarifiers
- Z124 Central Wastewater Treatment Plant Cooling tower
- Z125 Central Wastewater Treatment Plant Lime slurry system
- Z126 Carpenter Shop - East Metal grinder
- Z127 Carpenter Shop - East Woodworking
- Z128 Carpenter Shop - East Paints/Solvents/Adhesives
- Z129 Railroads - West Sand loading into hopper
- Z130 Railroads - West Sand usage by locomotive
- Z131 Railroads - West Degreasers
- Z132 Railroads - West Welding
- Z133 Railroads - East Sand loading into hopper
- Z134 Railroads - East Sand usage by locomotive
- Z135 Railroads - East Degreasers
- Z136 Railroads - East Welding
- Z137 Machine Shop - West Parts production milling, lathes, etc.
- Z138 Machine Shop - West Welding and cutting
- Z139 Machine Shop - West Degreasers
- Z140 Machine Shop - West Storage drums
- Z141 Machine Shop - East Parts production milling, lathes, etc.
- Z142 Machine Shop - East Degreasers
- Z143 Machine Shop - East Degreaser TYPHOON, detergent part washer
- Z144 Machine Shop - East Painting
- Z145 Machine Shop - East Natural gas parts heater
- Z146 Machine Shop - East Bulk oil dispensing rack
- Z147 Mobile Repair Shop - West Degreaser
- Z148 Mobile Repair Shop - West Degreaser
- Z149 Mobile Repair Shop - West Natural gas furnaces
- Z150 Mobile Repair Shop - West Space heater

B. State Only Enforceable Section (continued)

- 1.i
 - Z151 Mobile Repair Shop - West Storage drums
 - Z152 Mobile Repair Shop - West Steam cleaner
 - Z153 Finishing - West 80" Pickle Oiler
 - Z154 Mobile Repair Shop - East Degreaser
 - Z155 Mobile Repair Shop - East Welding
 - Z156 Mobile Repair Shop - East Space heaters
 - Z157 Mobile Repair Shop - East Oil/antifreeze
 - Z158 Mobile Repair Shop - East Hydraulic oil
 - Z159 Mobile Repair Shop - East Motor oil
 - Z160 Mobile Repair Shop - East Hot water heaters
 - Z161 Mobile Repair Shop - East Space heaters
 - Z162 Finishing - West 77" Temper Mill Roller/sprayer oiler
 - Z163 Finishing - West Hot Mill Roll Shop Steaming cleaning
 - Z164 Electric Shop - West Degreaser
 - Z165 Electric Shop - West Painting
 - Z166 Electric Shop - West Furnace
 - Z167 Electric Shop - West Furnace
 - Z168 Electric Shop - East Degreaser
 - Z169 Electric Shop - East Degreaser
 - Z170 Electric Shop - East Parts production lathes
 - Z171 Electric Shop - East Painting
 - Z172 Electric Shop - East Paint spray booth
 - Z173 Electric Shop - East Dip tank
 - Z174 Electric Shop - East Bake oven
 - Z175 Structural Shop - West Welding and cutting
 - Z176 Structural Shop - West Degreaser
 - Z177 Structural Shop - West Furnaces
 - Z178 Structural Shop - West Furnace
 - Z179 Structural Shop - West Furnace
 - Z180 Fabrication Shop - East Welding and cutting

- 1.j
 - Z181 Fabrication Shop - East Comfort heaters
 - Z182 Pipe Shop - West Cutting
 - Z183 Pipe Shop - West Degreaser
 - Z184 Pipe Shop - East Cutting
 - Z185 Pipe Shop - East Threading machining
 - Z186 Mason/Carpenter Shop - West Metal grinder
 - Z187 Mason/Carpenter Shop - West Woodworking
 - Z188 Mason/Carpenter Shop - West Paints/Solvents/ Adhesives
 - Z189 Electronic Repair Shop - East Soldering
 - Z190 Bottle Car Repair A - West Welding
 - Z191 Bottle Car Repair A - West Gradall excavator
 - Z192 Bottle Car Repair A - West Furnace
 - Z193 Bottle Car Repair B - West Hot metal dumping
 - Z194 Bottle Car Repair B - West Deskulling/ Gradall excavator use
 - Z195 Bottle Car Repair B - West Refractory gunning
 - Z196 Cosmos, McCarls, and Drum Storage Dust suppressant tank
 - Z197 Cosmos, McCarls, and Drum Storage - Storage drums
 - Z198 Finishing - East Continuous Anneal Line Inline Temper Mill
 - Z199 Miscellaneous - Landfill
 - Z200 Miscellaneous - Mix pit
 - Z201 Miscellaneous Tanks
 - Z202 Miscellaneous Oil/Lubricant/Grease Usage
 - Z203 Mobile Repair Shop - West Gasoline dispensing facility
 - Z204 Mobile Repair Shop - East Degreaser
 - Z205 Mobile Repair Shop - East Welding
 - Z206 Mobile Repair Shop - East Space heaters
 - Z207 Mobile Repair Shop - East Oil/antifreeze use
 - Z208 Mobile Repair Shop - East Hydraulic oil
 - Z209 Mobile Repair Shop - East Motor oil
 - Z210 Mobile Repair Shop - East Hot water heaters

B. State Only Enforceable Section (continued)

- 1.k** Z211 Mobile Repair Shop - East Space heaters
- Z212 Mobile Repair Shop - East Gasoline dispensing facility
- Z213 Mobile Repair Shop - East Gasoline dispensing facility
- Z214 Electric Shop - West Degreaser
- Z215 Electric Shop - West Painting
- Z216 Electric Shop - West Furnace
- Z217 Electric Shop - West Furnace
- Z218 Electric Shop - East Degreaser
- Z219 Electric Shop - East degreasers
- Z220 Electric Shop - East Parts production lathes
- Z221 Electric Shop - East Painting
- Z222 Electric Shop - East Paint spray booth
- Z223 Electric Shop - East Dip tank
- Z224 Electric Shop - East Bake oven
- Z225 Structural Shop - West Welding and cutting
- Z226 Structural Shop - West Degreaser
- Z227 Structural Shop - West Furnaces
- Z228 Structural Shop - West Furnace
- Z229 Structural Shop - West Furnace
- Z230 Fabrication Shop - East Welding and cutting
- Z231 Fabrication Shop - East Comfort heaters
- Z232 Pipe Shop - West Cutting
- Z233 Pipe Shop - West Degreaser
- Z234 Pipe Shop - East Cutting
- Z235 Pipe Shop - East Threading machining
- Z236 Mason/Carpenter Shop - West Metal grinder
- Z237 Mason/Carpenter Shop - West Woodworking
- Z238 Mason/Carpenter Shop - West Paints/Solvents/ Adhesives
- Z239 Electronic Repair Shop - East Soldering
- Z240 Bottle Car Repair A - West Welding

- 1.l** Z241 Bottle Car Repair A - West Gradall excavator
- Z242 Bottle Car Repair A - West Furnace
- Z243 Bottle Car Repair B - West Hot metal dumping
- Z244 Bottle Car Repair B - West Deskulling/ Gradall excavator use
- Z245 Bottle Car Repair B - West Refractory gunning
- Z246 Cosmos, McCarls, and Drum Storage Dust suppressant tank
- Z247 Cosmos, McCarls, and Drum Storage - Storage drums
- Z248 Miscellaneous - Gasoline dispensing facility - upper dock

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 A (B001)
Activity Description: Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
336 mmBtu/hr boiler fired with natural gas, No.6 oil and blast furnace gas Boiler A	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-12(P)(1)	0.086 lb of particulate emissions per million Btu actual heat input.
	OAC rule 3745-18-24(N)(1)	less stringent than 40 CFR 52.1881(B)(23(xi)(B)
	40 CFR 52.1881(B)(23(xi)(B)	0.99 lb/hr of sulfur dioxide emissions per mmBTU actual heat input. Combined sulfure dioxide emissions of 828 lbs/day (daily average) from Sources B001, B002, B003
	40 CFR 52.1881(B)(23(xi)(D)	Combined sulfur dioxide emissions of 1258 lbs/day (daily average) from Sources B001, B002, B003, B004
	40 CFR 52.1881(B)(23(xi)(G)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003, B004, B005, B006, B007
	OAC rule 3745-18-24(N)(13)	less stringent than 40 CFR 52.1881(B)(23(xi)(D)
	OAC rule 3745-18-24(N)(14)	less stringent than 40 CFR 52.1881(B)(23(xi)(G)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The quality of oil burned in this emission unit shall meet the following specifications on an as-received basis:
 - a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.99 lbs/mmBTU actual heat input.
 - b. a heat content greater than 136,000 BTU/gallon of oil.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of 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 SO₂ emission rate in lb/mmBtu.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
3. The permittee shall analyze the sulfur content of blast furnace gas burned in this emission unit on a monthly basis in accordance with OAC rule 3745-18-04(E)(4)(c).
4. The permittee shall record the pounds of sulfur dioxide emissions per day for this emission unit.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports which identify all deviations (excursions) and non-compliance time periods for the following:
 - 1.a The dates when combined quality of natural gas, oil and blast furnace gas burned in this emissions unit shall have a sulfur content which is insufficient to comply with the allowable sulfur dioxide emission limitation of 0.99 pounds of sulfur dioxide/mmBtu actual heat input.
 - 1.b Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003 exceeded 828 lbs/day.
 - 1.c Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003 and B004 exceeded 1258 lbs/day.
 - 1.d Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003, B004, B005, B006, and B007 exceeded 1958 lbs/day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation -
20% opacity, as a six-minute average
Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

V. Testing Requirements (continued)

1.b Emission Limitation -

0.086 lb particulate emissions /mmBtu actual heat input

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (328,767 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lb/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of No. 6 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (2,477 gal/hr) by the AP-42 emission factor for No. 6 fuel oil (9.19(S) + 3.22 lb/1000 gal) where S is the percent sulfur in the fuel oil, and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (4.02 mm cu.ft/hr) by the AP-42 emission factor for blast furnace gas (2.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr).

1.c Emission Limitation -

0.99 lb SO₂/mmBtu actual heat input

Applicable Compliance Method -

Ohio EPA reserves the option of requiring an emissions test as the primary method of determining compliance. Compliance shall otherwise be based upon the record keeping and reporting in sections III and IV.

1.d Emission Limitation -

Combined sulfur dioxide emissions of 828 lb/day (daily average) from sources B001, B002, and B003.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, and B003.

1.e Emission Limitation -

Combined sulfur dioxide emissions of 1258 lb/day (daily average) from sources B001, B002, B003 and B004.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003 and B004.

1.f Emission Limitation -

Combined sulfur dioxide emissions of 1958 lb/day (daily average) from sources B001, B002, B003, B004, B005, B006 and B007.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003, B004, B005, B006 and B007.

Facility Name: **ISG Cleveland Inc**
Facility ID: **13-18-00-1613**
Emissions Unit: **Boiler A (B001)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler B (B002)
Activity Description: Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
336 mmBtu/hr boiler fired with natural gas, No.6 oil and blast furnace gas Boiler A	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-12(P)(1)	0.086 lb of particulate emissions per million Btu actual heat input.
	OAC rule 3745-18-24(N)(1)	less stringent than 40 CFR 52.1881(B)(23(xi)(B)
	40 CFR 52.1881(B)(23(xi)(B)	0.99 lb/hr of sulfur dioxide emissions per mmBTU actual heat input. Combined sulfure dioxide emissions of 828 lbs/day (daily average) from Sources B001, B002, B003
	40 CFR 52.1881(B)(23(xi)(D)	Combined sulfur dioxide emissions of 1258 lbs/day (daily average) from Sources B001, B002, B003, B004
	40 CFR 52.1881(B)(23(xi)(G)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003, B004, B005, B006, B007
	OAC rule 3745-18-24(N)(13)	less stringent than 40 CFR 52.1881(B)(23(xi)(D)
	OAC rule 3745-18-24(N)(14)	less stringent than 40 CFR 52.1881(B)(23(xi)(G)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The quality of oil burned in this emission unit shall meet the following specifications on an as-received basis:
 - a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.99 lbs/mmBTU actual heat input.
 - b. a heat content greater than 136,000 BTU/gallon of oil.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of 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 SO₂ emission rate in lb/mmBtu.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
3. The permittee shall analyze the sulfur content of blast furnace gas burned in this emission unit on a monthly basis in accordance with OAC rule 3745-18-04(E)(4)(c).
4. The permittee shall record the pounds of sulfur dioxide emissions per day for this emission unit.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports which identify all deviations (excursions) and non-compliance time periods for the following:
 - 1.a The dates when combined quality of natural gas, oil and blast furnace gas burned in this emissions unit shall have a sulfur content which is insufficient to comply with the allowable sulfur dioxide emission limitation of 0.99 pounds of sulfur dioxide/mmBtu actual heat input.
 - 1.b Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003 exceeded 828 lbs/day.
 - 1.c Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003 and B004 exceeded 1258 lbs/day.
 - 1.d Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003, B004, B005, B006, and B007 exceeded 1958 lbs/day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation -
20% opacity, as a six-minute average
Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

V. Testing Requirements (continued)

1.b Emission Limitation -

0.086 lb particulate emissions /mmBtu actual heat input

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (328,767 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lb/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of No. 6 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (2,477 gal/hr) by the AP-42 emission factor for No. 6 fuel oil (9.19(S) + 3.22 lb/1000 gal) where S is the percent sulfur in the fuel oil, and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (4.02 mm cu.ft/hr) by the AP-42 emission factor for blast furnace gas (2.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr).

1.c Emission Limitation -

0.99 lb SO₂/mmBtu actual heat input

Applicable Compliance Method -

Ohio EPA reserves the option of requiring an emissions test as the primary method of determining compliance. Compliance shall otherwise be based upon the record keeping and reporting in sections III and IV.

1.d Emission Limitation -

Combined sulfur dioxide emissions of 828 lb/day (daily average) from sources B001, B002, and B003.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, and B003.

1.e Emission Limitation -

Combined sulfur dioxide emissions of 1258 lb/day (daily average) from sources B001, B002, B003 and B004.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003 and B004.

1.f Emission Limitation -

Combined sulfur dioxide emissions of 1958 lb/day (daily average) from sources B001, B002, B003, B004, B005, B006 and B007.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003, B004, B005, B006 and B007.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler C (B003)
Activity Description: Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
336 mmBtu/hr boiler fired with natural gas, No.6 oil and blast furnace gas Boiler A	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-12(P)(1)	0.086 lb of particulate emissions per million Btu actual heat input.
	OAC rule 3745-18-24(N)(1)	less stringent than 40 CFR 52.1881(B)(23(xi)(B)
	40 CFR 52.1881(B)(23(xi)(B)	0.99 lb/hr of sulfur dioxide emissions per mmBTU actual heat input. Combined sulfure dioxide emissions of 828 lbs/day (daily average) from Sources B001, B002, B003
	40 CFR 52.1881(B)(23(xi)(D)	Combined sulfur dioxide emissions of 1258 lbs/day (daily average) from Sources B001, B002, B003, B004
	40 CFR 52.1881(B)(23(xi)(G)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003, B004, B005, B006, B007
	OAC rule 3745-18-24(N)(13)	less stringent than 40 CFR 52.1881(B)(23(xi)(D)
	OAC rule 3745-18-24(N)(14)	less stringent than 40 CFR 52.1881(B)(23(xi)(G)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The quality of oil burned in this emission unit shall meet the following specifications on an as-received basis:
 - a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.99 lbs/mmBTU actual heat input.
 - b. a heat content greater than 136,000 BTU/gallon of oil.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of 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 SO₂ emission rate in lb/mmBtu.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
3. The permittee shall analyze the sulfur content of blast furnace gas burned in this emission unit on a monthly basis in accordance with OAC rule 3745-18-04(E)(4)(c).
4. The permittee shall record the pounds of sulfur dioxide emissions per day for this emission unit.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports which identify all deviations (excursions) and non-compliance time periods for the following:
 - 1.a The dates when combined quality of natural gas, oil and blast furnace gas burned in this emissions unit shall have a sulfur content which is insufficient to comply with the allowable sulfur dioxide emission limitation of 0.99 pounds of sulfur dioxide/mmBtu actual heat input.
 - 1.b Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003 exceeded 828 lbs/day.
 - 1.c Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003 and B004 exceeded 1258 lbs/day.
 - 1.d Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003, B004, B005, B006, and B007 exceeded 1958 lbs/day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation -
20% opacity, as a six-minute average
Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

V. Testing Requirements (continued)

1.b Emission Limitation -

0.086 lb particulate emissions /mmBtu actual heat input

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (328,767 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lb/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of No. 6 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (2,477 gal/hr) by the AP-42 emission factor for No. 6 fuel oil (9.19(S) + 3.22 lb/1000 gal) where S is the percent sulfur in the fuel oil, and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (4.02 mm cu.ft/hr) by the AP-42 emission factor for blast furnace gas (2.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr).

1.c Emission Limitation -

0.99 lb SO₂/mmBtu actual heat input

Applicable Compliance Method -

Ohio EPA reserves the option of requiring an emissions test as the primary method of determining compliance. Compliance shall otherwise be based upon the record keeping and reporting in sections III and IV.

1.d Emission Limitation -

Combined sulfur dioxide emissions of 828 lb/day (daily average) from sources B001, B002, and B003.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, and B003.

1.e Emission Limitation -

Combined sulfur dioxide emissions of 1258 lb/day (daily average) from sources B001, B002, B003 and B004.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003 and B004.

1.f Emission Limitation -

Combined sulfur dioxide emissions of 1958 lb/day (daily average) from sources B001, B002, B003, B004, B005, B006 and B007.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003, B004, B005, B006 and B007.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler D (B004)
Activity Description: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
467 mmBtu/hr boiler D fired with natural gas, coal and blast furnace gas. Particulate emissions are controlled by an ESP when burning coal.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	See A I.2a.
	OAC rule 3745-17-10(C)(1)	See A I.2b.
	OAC rule 3745-18-24(N)(2)	2.45 lbs of sulfur dioxide emissions per million Btu actual heat input. 1056 lbs/hr daily average sulfur dioxide emissions
	40 CFR 52.1881(B)(23)(xi)(G)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003, B004, B005, B006, B007
	OAC rule 3745-18-24(N)(13)	less stringent than 40 CFR 52.1881(B)(23)(xi)(D)
	OAC rule 3745-18-24(N)(14)	less stringent than 40 CFR 52.1881(B)(23)(xi)(G)
	40 CFR 52.1881(B)(23)(xi)(D)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003 and B004
	40 CFR 52.1881(B)(23)(xi)(D)	Combined sulfur dioxide emissions of 1258 lbs/day (daily average) from Sources B001, B002, B003 and B004

2. Additional Terms and Conditions

- 2.a Particulate emissions are limited to 0.040 lb per million Btu actual heat input except when burning coal.
- 2.b Particulate emissions are limited to 0.13 lb per million Btu actual heat input when burning coal.

II. Operational Restrictions

1. The quality of the coal burned in this emissions unit shall meet the following specifications on a dry basis:
 - a. less than 12.0 percent ash by weight;
 - b. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 2.45 pounds sulfur dioxide/mmBtu actual heat input; and
 - c. greater than 12,300 Btu/pound of coal.
2. The permittee shall operate an ESP and COM when burning coal in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. This facility shall collect a representative sample of each shipment of coal which is received for burning in this emissions unit. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be ASTM method D3174, Ash in the Analysis of Coal and Coke, ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, or ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, respectively. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

2. This facility shall record the total quantity of coal received in each shipment.
3. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one- minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

4. The permittee shall analyze the sulfur content of blast furnace gas burned in this emission unit on a monthly basis in accordance with OAC rule 3745-18-04(E)(4)(c).
5. The permittee shall record the pounds of sulfur dioxide emissions per day for this emission unit.

IV. Reporting Requirements

1. Quarterly reports concerning the quality and quantity of coal received for burning in this emissions unit shall be submitted to the appropriate Ohio EPA District Office or local air agency. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal received (tons);
 - b. the average ash content (percent) of the coal received;
 - c. the average sulfur content (percent) of the coal received;
 - d. the average heat content (Btu/lb) of the coal received; and
 - e. the calculated, average sulfur dioxide emission rate (pounds sulfur dioxide/MM Btu actual heat input) for the coal received.

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

IV. Reporting Requirements (continued)

- 2.** Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

- 3.** The permittee shall submit written deviation (excursion) reports which identify all deviations (excursions) and non-compliance time periods for the following:
 - 3.a** The dates when combined quality of natural gas, coal and blast furnace gas burned in this emissions unit has a sulfur content which is insufficient to comply with the allowable sulfur dioxide emission limitation of 2.45 pounds of sulfur dioxide/mmBtu actual heat input.
 - 3.b** Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003 and B004 exceeded 1258 lbs/day.
 - 3.c** Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003, B004, B005, B006, and B007 exceeded 1958 lbs/day.

V. Testing Requirements

- 1.** Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a** Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

V. Testing Requirements (continued)

1.b Emission Limitation -

0.040 lb particulate emissions/mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (328,767 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of No. 6 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (2,477 gal/hr) by the AP-42 emission factor for No. 6 fuel oil (9.19(S) + 3.22 lb/1000 gal) where S is the percent sulfur in the fuel oil, and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (4.02 mm cu.ft/hr) by the AP-42 emission factor for blast furnace gas (2.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (336 mmBtu/hr).

1.c Emission Limitation:

2.45 lbs of sulfur dioxide emissions per million Btu actual heat input

Ohio EPA reserves the option of requiring an emissions test as the primary method of determining compliance. Compliance shall otherwise be based upon the record keeping and reporting in sections III and IV.

1.d Emission Limitation:

0.13 lb of particulate emissions/mmBtu actual heat input when burning coal.

Applicable Compliance Method: Compliance shall be based upon emissions testing in section V.2..

1.e Emission Limitation -

Combined sulfur dioxide emissions of 1258 lb/day (daily average) from sources B001, B002, B003 and B004.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003 and B004.

1.f Emission Limitation -

Combined sulfur dioxide emissions of 1958 lb/day (daily average) from sources B001, B002, B003, B004, B005, B006 and B007.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003, B004, B005, B006 and B007.

V. Testing Requirements (continued)

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

The emission testing shall be conducted approximately 3 months after permit issuance and within 6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions when burning coal.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate of particulate emissions: Method 5 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler 1 (B005)
Activity Description: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
237.5 mmBtu/hr boiler fired by natural gas and blast furnace gas	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	0.040 lb of particulate emissions per million Btu actual heat input.
	OAC rule 3745-18-24(N)(3)	See A.2.a
	40 CFR 52.1881(B)(23)(xi)(G)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003, B004, B005, B006, B007
	OAC rule 3745-18-24(N)(14)	less stringent than 40 CFR 52.1881(B)(23)(xi)(G)

2. Additional Terms and Conditions

- 2.a Boiler numbers 1 and 2 (OEPA source numbers B005 and B006); a maximum of 1.64 pounds of sulfur dioxide per mmBtu actual heat input from each boiler and a daily average not to exceed three hundred fifteen pounds of sulfur dioxide per hour from both boilers.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or blast furnace 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 and/or blast furnace gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. The permittee shall analyze the sulfur content of blast furnace gas burned in this emission unit on a monthly basis in accordance with OAC rule 3745-18-04(E)(4)(c).
4. The permittee shall record the pounds of sulfur dioxide emissions per day for this emission unit.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports which identify all deviations (excursions) and non-compliance time periods for the following:
 - 1.a The dates when combined quality of natural gas and blast furnace gas burned in this emissions unit shall have a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.64 pounds of sulfur dioxide/mmBtu actual heat input.
 - 1.b Dates when the combined daily average sulfur dioxide emissions from sources B005 and B006 exceeded 315 lbs/day.
 - 1.c Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003, B004, B005, B006, and B007 exceeded 1958 lbs/day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - 1.b Emission Limitation -

0.040 lb of particulate emissions/mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (231,800 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (300 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (2.83 mm cu.ft/hr) by the AP-42 emission factor for blast furnace gas (2.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (300 mmBtu/hr).
 - 1.c Emission Limitation -

1.64 pounds of sulfur dioxide emissions per mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (231,800 cu.ft/hr) by the U.S. EPA emission factor for natural gas (0.6 lb/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (237.5 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (2.83 mmcu.ft/hr) by the U.S. EPA emission factor for blast furnace gas (950S lbs/mmcu.ft where S is the %sulfur in the blast furnace gas) and dividing by the maximum hourly heat input capacity of the emissions unit (237.5 mmBtu/hr).

V. Testing Requirements (continued)

1.d Emission Limitation -

Combined sulfur dioxide emissions of 315 lb/day (daily average) from sources B005 and B006.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, and B003.

1.e Emission Limitation -

Combined sulfur dioxide emissions of 1958 lb/day (daily average) from sources B001, B002, B003, B004, B005, B006 and B007.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003, B004, B005, B006 and B007.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler 2 (B006)
Activity Description: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
237.5 mmBtu/hr boiler fired by natural gas and blast furnace gas	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	0.040 lb of particulate emissions per million Btu actual heat input.
	OAC rule 3745-18-24(N)(3)	See A.2.a
	40 CFR 52.1881(B)(23)(xi)(G)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003, B004, B005, B006, B007
	OAC rule 3745-18-24(N)(14)	less stringent than 40 CFR 52.1881(B)(23)(xi)(G)

2. Additional Terms and Conditions

- 2.a Boiler numbers 1 and 2 (OEPA source numbers B005 and B006); a maximum of 1.64 pounds of sulfur dioxide per mmBtu actual heat input from each boiler and a daily average not to exceed three hundred fifteen pounds of sulfur dioxide per hour from both boilers.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or blast furnace 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 and/or blast furnace gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. The permittee shall analyze the sulfur content of blast furnace gas burned in this emission unit on a monthly basis in accordance with OAC rule 3745-18-04(E)(4)(c).
4. The permittee shall record the pounds of sulfur dioxide emissions per day for this emission unit.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports which identify all deviations (excursions) and non-compliance time periods for the following:
 - 1.a The dates when combined quality of natural gas and blast furnace gas burned in this emissions unit shall have a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.64 pounds of sulfur dioxide/mmBtu actual heat input.
 - 1.b Dates when the combined daily average sulfur dioxide emissions from sources B005 and B006 exceeded 315 lbs/day.
 - 1.c Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003, B004, B005, B006, and B007 exceeded 1958 lbs/day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - 1.b Emission Limitation -

0.040 lb of particulate emissions/mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (231,800 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (300 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (2.83 mm cu.ft/hr) by the AP-42 emission factor for blast furnace gas (2.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (300 mmBtu/hr).
 - 1.c Emission Limitation -

1.64 pounds of sulfur dioxide emissions per mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (231,800 cu.ft/hr) by the U.S. EPA emission factor for natural gas (0.6 lb/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (237.5 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (2.83 mmcu.ft/hr) by the U.S. EPA emission factor for blast furnace gas (950S lbs/mmcu.ft where S is the %sulfur in the blast furnace gas) and dividing by the maximum hourly heat input capacity of the emissions unit (237.5 mmBtu/hr).

V. Testing Requirements (continued)

1.d Emission Limitation -

Combined sulfur dioxide emissions of 315 lb/day (daily average) from sources B005 and B006.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, and B003.

1.e Emission Limitation -

Combined sulfur dioxide emissions of 1958 lb/day (daily average) from sources B001, B002, B003, B004, B005, B006 and B007.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003, B004, B005, B006 and B007.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler 3 (B007)
Activity Description: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
388 mmBtu/hr boiler #3 fired by coal, natural gas and blast furnace gas. Particulate emissions are controlled by an ESP when burning coal	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	See A.I.2.a
	OAC rule 3745-17-10(C)(1)	See A.I.2.b
	OAC rule 3745-18-24(N)(4)	See A.I.2.c.
	40 CFR 52.1881(B)(23(xi)(G)	Combined sulfur dioxide emissions of 1958 lbs/day (daily average) from Sources B001, B002, B003, B004, B005, B006, B007
	OAC rule 3745-18-24(N)(14)	less stringent than 40 CFR 52.1881(B)(23(xi)(G)

2. Additional Terms and Conditions

- 2.a** Particulate emissions are limited to 0.040 lb per million Btu actual heat input except when burning coal.
- 2.b** Particulate emissions are limited to 0.13 lb per million Btu actual heat input when burning coal.
- 2.c** Boiler number 3 (OEPA source number B007); a maximum of 2.39 pounds of sulfur dioxide emissions per mmBtu actual heat input and a daily average not to exceed six hundred eighty-six pounds of sulfur dioxide per hour.

II. Operational Restrictions

1. The permittee shall operate an ESP when burning coal in this emissions unit.
2. The quality of the coal burned in this emissions unit shall meet the following specifications on a dry basis:
 - a. less than 12.0 percent ash by weight;
 - b. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 2.39 pounds sulfur dioxide/mmBtu actual heat input; and
 - c. greater than 12,300 Btu/pound of coal.

III. Monitoring and/or Record Keeping Requirements

1. This facility shall collect a representative sample of each shipment of coal which is received for burning in this emissions unit. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be ASTM method D3174, Ash in the Analysis of Coal and Coke, ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, or ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, respectively. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

2. This facility shall record the total quantity of coal received in each shipment.
3. The permittee shall analyze the sulfur content of blast furnace gas burned in this emission unit on a monthly basis in accordance with OAC rule 3745-18-04(E)(4)(c).
4. The permittee shall record the pounds of sulfur dioxide emissions per day for this emission unit.

IV. Reporting Requirements

1. Quarterly reports concerning the quality and quantity of coal received for burning in this emissions unit shall be submitted to the appropriate Ohio EPA District Office or local air agency. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal received (tons);
 - b. the average ash content (percent) of the coal received;
 - c. the average sulfur content (percent) of the coal received;
 - d. the average heat content (Btu/lb) of the coal received; and
 - e. the calculated, average sulfur dioxide emission rate (pounds sulfur dioxide/MM Btu actual heat input) for the coal received.

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

- 1.d Dates when the combined daily average sulfur dioxide emissions from sources B001, B002, B003, B004, B005, B006, and B007 exceeded 1958 lbs/day.
2. The permittee shall submit written deviation (excursion) reports which identify all deviations (excursion) and non-compliance time periods for the following:
 - 2.a The dates when combined quality of natural gas, coal and blast furnace gas burned in this emissions unit shall have a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 2.39 pounds of sulfur dioxide/mmBtu actual heat input.
 - 2.b Dates when the daily average sulfur dioxide emissions from sources B007 exceeded 686 lbs/day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

V. Testing Requirements (continued)

1.a Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

1.b Emission Limitation -

0.040 lb of particulate emissions/mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (379,000 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lb/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (388 mmBtu/hr). For the use of blast furnace gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (4.62 mmcu.ft/hr) by the AP-42 emission factor for blast furnace gas (2.9 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (388 mmBtu/hr).

1.c Emission Limitation:

0.13 lb of particulate emissions/mmBtu actual heat input when burning coal.

Applicable Compliance Method: Compliance shall be based upon emissions testing in section V.2..

1.d Emission Limitation:

2.39 lbs of sulfur dioxide emissions per million Btu actual heat input

Applicable Compliance Method: Compliance shall be based upon the monitoring and record keeping in III.1 and III.2.

1.e Emission Limitation -

Combined sulfur dioxide emissions of 1958 lb/day (daily average) from sources B001, B002, B003, B004, B005, B006 and B007.

Applicable Compliance Method -

Compliance shall be determined by calculating the combined daily average sulfur dioxide emissions from source B001, B002, B003, B004, B005, B006 and B007.

V. Testing Requirements (continued)

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

The emission testing shall be conducted approximately 3 months after permit issuance and within 6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate of particulate emissions while burning coal.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate of particulate emissions: Method 5 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways and Parking Lots (F001)

Activity Description: Paved and unpaved roads and parking lots - east and westsides.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and parking areas	OAC rule 3745-17-08 (B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust
	OAC rule 3745-17-12 (P)(2)	Applies to the eastside paved and unpaved roads and parking areas. 5% opacity as determined in accordance with OAC rule 3745-17-03(B)(3)
	OAC rule 3745-17-12 (O)(1)	Applies to the westside paved and unpaved roads and parking areas. 5% opacity as determined in accordance with OAC rule 3745-17-03(B)(3)

2. Additional Terms and Conditions

- 2.a The paved and unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-08 and 3745-17-12(P)(2) are listed below:

All roadways and parking areas at the facility located at 3341 Jennings Road

- 2.b The paved and unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-08 and 3745-17-12(P)(2) are listed below:

All roadways and parking areas at the facility located at 3100 E. 45th Street

- 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 watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.d The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2. Additional Terms and Conditions (continued)

- 2.e** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for 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:

paved roadways and parking areas	minimum inspection frequency
Daily	Daily
unpaved roadways and parking areas	minimum inspection frequency
Daily	Daily
- 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.

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

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

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

IV. Reporting Requirements

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

V. Testing Requirements

1. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Materials Unloading - C5/C6 Blast Furnaces (F003)
Activity Description: Blast furnace materials unloading: ore and limestone.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Material unloading (ore and limestone) for C5/C6 blast furnaces.	OAC 3745-17-07(B)	See A.1.2.a below.
	OAC 3745-17-08(B)	See A.1.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the source.
- 2.b The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
 - i. the use of water spray system capable of supplying an adequate amount of water on material being unloaded to capture, and minimize the fugitive dust; and
 - ii. the control 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.

At a minimum, the permittee's employment of RACM shall include the following: water spray system.
- 2.c If the permittee can demonstrate compliance with the visible emissions restriction contained in section A.1.2.a above, the employment of the permittee's RACM, in accordance with the requirements of section A.1.2.b above, will be deemed adequate.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for unloading operations that are not adequately enclosed, the permittee shall perform inspections of such operations on a daily basis.
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Cleveland Bureau of Air Pollution Control, 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)

4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. 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:

20% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

1. NONE

II. Operational Restrictions

1. NONE

III. Monitoring and/or Record Keeping Requirements

1. NONE

IV. Reporting Requirements

1. NONE

V. Testing Requirements

1. NONE

VI. Miscellaneous Requirements

1. NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Materials Handling - C5/C6 Blast Furnace (F010)

Activity Description: Blast furnace material handling; ore, limestone, slag, coke and coke fines transfer.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast furnace material handling: ore, limestone, slag, coke and coke fines transfer.	OAC 3745-17-08 (B)	No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.
	OAC 3745-17-12 (P)(5)	
	OAC 3745-17-07 (B)	For the coke handling, screening, and conveying system at coke plant number 1 and the raw material handling at the blast furnaces C-5 and C-6, visible particulate emissions of fugitive dust shall not exceed five percent opacity as a six-minute average. See A.I.2.e below.

2. Additional Terms and Conditions

- 2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07, 3745-17-08 and 3745-17-12 are listed below:
 - i. Railcar unloading of iron ore, slag and dolomite
 - ii. Stockhouse storage bins for coke, iron ore, dolomite, sinter and slag.
 - iii. Stockhouse conveyor
 - iv. Two skip cars used in the conveying operations

2. Additional Terms and Conditions (continued)

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)

- i. Railcar unloading of iron ore, slag and dolomite
- ii. Stockhouse storage bins for coke, iron ore, dolomite, sinter and slag.
- iii. Stockhouse conveyor
- iv. Two skip cars used in the conveying operations

control measure(s)

adequate quantities of water or other dust suppressants to the coke, iron ore, dolomite, sinter and slag storage as to minimize or eliminate emissions of fugitive dust.

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

- 2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
- 2.e** Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the source.

II. Operational Restrictions

1. 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 inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)

- i. Railcar unloading of iron ore, slag and dolomite
- ii. Stockhouse storage bins for coke, iron ore, dolomite, sinter and slag.
- iii. Stockhouse conveyor
- iv. Two skip cars used in the conveying operations

minimum inspection frequency

daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Cleveland Air Pollution Department, 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;
 - 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 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

2. Emission Limitation:

5% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast furnace material handling: ore, limestone, slag, coke and coke fines transfer.		

2. Additional Terms and Conditions

1. NONE

II. Operational Restrictions

1. NONE

III. Monitoring and/or Record Keeping Requirements

1. NONE

IV. Reporting Requirements

1. NONE

V. Testing Requirements

1. NONE

VI. Miscellaneous Requirements

1. NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 BOF Hot Metal Transfer Station (F011)
Activity Description: Hot metal reladle, desulfurization, and slag raking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hot metal reladle, desulfurization, and slag raking with a 700,000 acfm (120 deg. F.) baghouse which also controls #2 BOF secondary emissions.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack associated with this emissions unit 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 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)(3)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit (see T&C A.2.a.)
Desulfurization	OAC rule 3745-17-12(P)(6)	See A.I.2.b
	OAC rule 3745-31-05(A)(3) PTI #13-1074	See A.I.2.c PE: 0.01 gr/dscf
Desulfurization	OAC rule 3745-18-06(E)(1)	See A.I.2.d 1144 LBS/HR SO ₂ from this emissions unit*

*The potential SO₂ emissions are less than the allowable. Therefore, no monitoring, record keeping, reporting, or compliance measures are necessary.

2. Additional Terms and Conditions

- 2.a** RACM shall be the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:
- i. the collection efficiency 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; and
 - ii. the control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s), which ever is less stringent.
- 2.b** The area around the reladling, desulfurizing and slag raking processes shall be thoroughly cleaned once a month to remove the excess accumulation of kish which may become airborne.
- 2.c** For the charging and tapping operations associated with the numbers 1 and 2 basic oxygen furnaces (OEPA source numbers P905 and P906), the hot metal desulfurization and hot metal transfer station (OEPA source number F011), and the teeming operation (OEPA source number F013), the particulate emissions from the stack of the secondary emission control baghouse serving such sources shall not exceed 10.3 pounds per hour.
- 2.d** The operation of desulfurization shall not be carried while hot metal is being charged to either of the two BOF vessels unless the permittee demonstrates by stack tests that emissions from such overlapping of operations does not exceed on outlet grain loading of 0.01 gr/dscf.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 - 4 inches of water 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 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.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible particulate emissions from the stack serving this emissions unit. The presence or absence of any abnormal 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 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 abnormal 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 abnormal visible emissions.
4. Monitor the performance of the hot metal reladle, desulfurization and slag reladle emission control system baghouse by continuously recording visible emissions from the baghouse stack using a continuous opacity monitor which shall be calibrated, maintained and operated in accordance with the procedures set forth in 40 CFR Part 60, Appendix B.

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

4.a Continuous Emission Monitoring System

The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

4.b Continuous Opacity Monitoring - Certified Systems Statement of Certification

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

4.c The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one- minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

4.d Quality assurance/quality control

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

- 1.** The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions. Refer to General Term and Condition A.1.c. for the reporting frequency.
- 2.** The permittee shall submit semiannual written reports which (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control 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 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 abnormal visible fugitive particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control by January 31 and July 31 of each year and shall cover the previous 6-month period.

IV. Reporting Requirements (continued)

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- 1.a Emission Limitation:

20% opacity as a six-minute average

Applicable Compliance Method(s):

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- 1.b Emission Limitation:

20% opacity as a 3-minute average.

Applicable Compliance Method(s):

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- 1.c Emission Limitation:

PE: 10.3 lbs/hr

Applicable Compliance Method:

Compliance shall be based upon using emissions factors derived from material balance calculations for this emissions unit or using results from the most recent stack test.

If required, compliance shall be demonstrated by testing in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.d Particulate Emission Limitation:

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 and approximately 2.5 years after permit issuance.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate of 39.8 pounds particulate per hour.
- c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rate:

Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control.

- ### 1.e
- Not later than 30 days prior to the proposed test dates, the permittee shall submit "Intent to Test" notifications to the Cleveland Bureau of Air Pollution Control. The "Intent to Test" notifications shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates 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 Cleveland Bureau of Air Pollution Control's refusal to accept the results of the emission tests.

Personnel from the Cleveland Bureau of Air Pollution Control shall be permitted to witness the tests, 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 each emissions test shall be signed by the person or persons responsible for the tests and submitted to the Cleveland Bureau of Air Pollution Control within 30 days following completion of each test.

1.f Emission Limitation:

0.01 gr/dscf

Applicable Compliance Method:

This emission limitation has already been included in the 10.3 lbs PE/hr limit cited in the immediately preceding item A.V.1.c above and, as a result, the applicable compliance method has been detailed.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 BOF Raw Material Handling (F012)
Activity Description: Scrap, and lime and flux handling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Scrap, lime, and flux raw material handling.	OAC 3745-17-07(B)	See A.I.2.a below.
	OAC 3745-17-08(B)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from source.
- 2.b The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
 - i. the use of water spray system capable of supplying an adequate amount of water on material being unloaded to capture, and minimize the fugitive dust; and
 - ii. the control 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.

At a minimum, the permittee's employment of RACM shall include the following: water spray system.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for unloading operations that are not adequately enclosed, the permittee shall perform inspections of such operations on a daily basis.
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Cleveland Bureau of Air Pollution Control, 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)

4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. 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:

20% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.
 - 1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

1. NONE

II. Operational Restrictions

1. NONE

III. Monitoring and/or Record Keeping Requirements

1. NONE

IV. Reporting Requirements

1. NONE

V. Testing Requirements

1. NONE

VI. Miscellaneous Requirements

1. NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coke Thawing and Unloading - C5/C6 Blast Furnace (F016)
Activity Description: Coke unloading and thawing.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Railcar unloading (bottom dump of coke) and car thaw with natural gas fired infra-red 30.75 mmBtu/hr heaters.	OAC rule 3745-17-07(B)(1)	Less stringent than BAT (below).
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)
Truck dumping of coke into receiving hoppers.	OAC rule 3745-17-10	0.02 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(B)(1)	20 percent opacity, as a three-minute average.
Coke conveyors Nos. N, M4 and M5.	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)
	OAC rule 3745-17-07(B)(1)	20 percent opacity, as a three-minute average.
Conveyor transfer points.	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)
	OAC rule 3745-17-07(B)(1)	20 percent opacity, as a three-minute average.
Coke storage bins loading and unloading at storage bin building.	OAC rule 3745-17-07(B)(1)	20 percent opacity, as a three-minute average.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d).
A 170 ton maximum/hr coke unloading from trucks, bottom dump (car shakers), car thaw (with natural gas fired infra-red 30.75 mmBtu/hr heaters and transfer with fabricated total enclosed shed with flexible end covers, underground hoppers and conveyors and totally enclosed above ground conveyors and transfer points.	OAC rule 3745-31-05(A)(3)	See A.I.2.e.

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

- i. Railcar unloading (bottom dump of limestone, dolomite, slag, mill scale and coke breeze into rail hoppers)
- ii. Truck unloading (dumping of sludge and flue dust into receiving hopper)
- iii. Conveyors (Nos. 109 thru 118 from unloading to sinter machine feed hopper)
- iv. Conveyor transfer points
- v. Raw material screening
- vi. Storage bin loading/unloading (at storage bin building)
- vii. Associated transfer stations

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)

See A.I.2.

control measure(s)

- i. sufficient water or other suitable dust suppressants to the ore storage piles to minimize or eliminate visible emissions of fugitive dust from the conveyors;
- ii. maintain the existing total enclosures of all transfer stations except for the last transfer station where a partial enclosure shall continue to be used to minimize or eliminate visible emissions of fugitive.

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

2. Additional Terms and Conditions (continued)

- 2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
- 2.e** BAT requirements:
- i. Railcar bottom dumping and transfer points enclosed
 - ii. A maximum of 4100 tons/day of coke unloading
 - iii. A maximum visible emission of 5% opacity as a six-minute average
 - iv. A maximum particulate (PE) emission rate of 0.9 lb/hr
 - v. A maximum PM10 emission rate of 0.56 lb/hr
 - vi. A maximum Nox emission limit of 3.1 lbs/hr and 0.1 lb/mmBtu; and
 - vii. A maximum natural gas usage rate of 118 mm ft3 per rolling 12-month average.

II. Operational Restrictions

1. The maximum coke unloaded at this emissions unit shall not exceed 4100 tons/day.
2. The maximum natural gas usage rate for the infra-red heaters in this emissions unit shall not exceed 118 mm cubic feet based upon a rolling 12-month summation of the natural gas usage rates.

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 inspections of such operations on a weekly basis.
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Cleveland Bureau of Air Pollution Control, 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;
 - 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 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

5. The permittee shall maintain daily records of the coke unloaded at this emissions unit.

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

6. The permittee shall maintain monthly records of the following information:
 - (a) The natural gas usage rate for each month.
 - (b) The rolling, 12-month summation of the natural gas usage rates.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that identify any exceedances of the daily coke unloading rate limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.
4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month natural gas usage rate limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

V. Testing Requirements

1. Compliance with the emission limitation(s) in Sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation: 5% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emissions observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

VI. Miscellaneous Requirements

1. Annual certification
2. Annual certification

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coke Handling - C5/C6 Blast Furnace (F017)

Activity Description: Coke transfer to 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coke transfer to Blast Furnace.	3745-17-08(B) 3745-31-05(A)(3)	20 percent opacity, as a three-minute average Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)

2. Additional Terms and Conditions

- 2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Coal unloading(bottom dumping of rail cars and truck unloading), conveyors(No. 1 thru 3), coal bunker, and coal bins.

2. Additional Terms and Conditions (continued)

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)

Coal unloading(bottom dumping of rail cars and truck unloading) shall be controlled as follows:

i. employ and maintain total enclosures above all conveyors associated with this emissions unit.

Conveyors and conveyor transfer points shall be controlled as follows:

i. employ and maintain total enclosures above all conveyors and transfer points associated with this emissions unit.

Coal bunker shall be controlled as follows:

i. employ and maintain total the building enclosure associated with this emissions unit.

Coal bins shall be controlled as follows:

i. employ and maintain total building enclosure around the coal bins associated with this emissions unit.

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

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

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

II. Operational Restrictions

1. 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 inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)

Coal unloading(bottom dumping of rail cars and truck unloading), conveyors(No.1 thru 3), coal bunker and coal bins

minimum inspection frequency

weekly

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

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

3. The permittee may, upon receipt of written approval from the Cleveland Air Pollution Bureau, 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;
 - 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 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coke transfer to Blast Furnace.		

2. Additional Terms and Conditions

1. NONE

II. Operational Restrictions

1. NONE

III. Monitoring and/or Record Keeping Requirements

1. NONE

IV. Reporting Requirements

1. NONE

V. Testing Requirements

1. NONE

VI. Miscellaneous Requirements

1. NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Materials Unloading - C1 Blast Furnace (F202)

Activity Description: Blast furnace materials unloading: ore, coke and limestone.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast furnace materials unloading: coke.	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 specified by rule.
	OAC rule 3745-17-08	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust
Blast furnace materials unloading: ore.	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 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
Blast furnace materials unloading: limestone.	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 specified by rule.
	OAC rule 3745-17-08	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Conveyors	OAC rule 3745-17-07(B) OAC rule 3745-17-08(B)	Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule. reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust

2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for unloading operations that are not adequately enclosed, the permittee shall perform inspections of such operations on a daily basis.
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Cleveland Bureau of Air Pollution Control, 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;
 - 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 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the visible emission limitation for the unloading operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.
2. Compliance with OAC rule 3745-17-07(A) shall be demonstrated by methods outlined in OAC rule 3745-17-03(B).
3. If testing is required to demonstrate compliance with the allowable emission limitation of 0.03 g/dscf then, testing shall be conducted using the following method:

Method 5, 40 CFR Part 60, Appendix A.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast furnace materials unloading: coke.		
Blast furnace materials unloading: ore.		
Blast furnace materials unloading: limestone.		
Conveyors		

2. Additional Terms and Conditions

1. NONE

II. Operational Restrictions

1. NONE

III. Monitoring and/or Record Keeping Requirements

1. NONE

IV. Reporting Requirements

1. NONE

V. Testing Requirements

1. NONE

VI. Miscellaneous Requirements

1. NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Materials Handling - C1Blast Furnace (F204)

Activity Description: Blast furnace material handling: ore, limestone, slag, coke and coke fines transfer.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast furnace material handling: ore, limestone, slag, coke and coke fines transfer.	3745-17-08 (B)	No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.
	3745-17-12 (O)(4)	For the handling of blast furnace raw materials, visible particulate emissions of fugitive dust shall not exceed five percent opacity as a six-minute average.

2. Additional Terms and Conditions

- 2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
 - i. Railcar unloading of iron ore, slag and dolomite
 - ii. Stockhouse storage bins for coke, iron ore, dolomite, sinter and slag.
 - iii. Stockhouse conveyor
 - iv. Two skip cars used in the conveying operations
 - v. Storage piles

2. Additional Terms and Conditions (continued)

- 2.b** The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)

See A.I.2.

control measure(s)

adequate quantities of water or other dust suppressants to the coke, iron ore, dolomite, sinter and slag storage as to minimize or eliminate emissions of fugitive dust.

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

- 2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

1. 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 inspections of such operations in accordance with the following minimum frequencies:
- material handling operation(s)
- See A.I.2.
- minimum inspection frequency
- daily
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. 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)

4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast furnace material handling: ore, limestone, slag, coke and coke fines transfer.		

2. Additional Terms and Conditions

1. NONE

II. Operational Restrictions

1. NONE

III. Monitoring and/or Record Keeping Requirements

1. NONE

IV. Reporting Requirements

1. NONE

V. Testing Requirements

1. NONE

VI. Miscellaneous Requirements

1. NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 BOF Hot Metal Transfer Station (F209)
Activity Description: Hot metal reladle, desulfurization, and slag raking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
A 225 tons/hour hot metal reladle, desulfurization, and slag raking and a (11,625x14=) 162,750 acfm (133 deg. F.) baghouse with 14 compartments, 14 fans and 14 stacks.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack associated with this emissions unit 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 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)(3)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit (see T&C A.I.2.a.)
Desulfurization	OAC rule 3745-17-12(O)(2) & (3)	See A.I.2.b See A.I.2.c
	OAC rule 3745-31-05(A)(3) PTI #13-1158	PE: Less than 5% opacity
Desulfurization	OAC rule 3745-18-06(E)(1)	See A.II.2, A.II.3, A.II.4, A.II.5, A.III.4 and A.II.6. 753 lbs/hr SO ₂ from this emissions unit* *The potential SO ₂ emissions are less than the allowable. Therefore, no monitoring, record keeping, reporting, or compliance measures are necessary.

2. Additional Terms and Conditions

- 2.a** RACM shall be the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:
- i. the collection efficiency 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; and
 - ii. the control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s), which ever is less stringent.
- 2.b** The area around the reladling, desulfurizing and slag raking processes shall be thoroughly cleaned once a month to remove the excess accumulation of kish which may become airborne.
- 2.c** For the hot metal reladling, desulfurization, slag raking and ladle transfer operations (OEPA emissions unit number F009)(F213 - formerly F013 - has been dismantled & removed from premises), the total particulate emissions from the baghouse serving this emissions unit shall not exceed 21.0 pounds per hour.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 - 4 inches of water while the emissions unit is in operation.
2. The process of desulfurization shall not be carried out during transfer of the hot metal.
3. The process of desulfurization shall not be carried out at the transfer station unless at least twelve (12) of the fourteen (14) compartment systems are maintained and are operating in satisfactory condition.
4. There shall be no visible emissions of an opacity equal to or greater than 5% from any of the fourteen (14) baghouse stacks while desulfurization is in progress.
5. The permittee shall maintain on hand a supply of at least 10% of the total number of bags in the fourteen compartments.
6. The permittee shall operate all fourteen (14) compartments at all times the baghouse is in operation, except that a maximum of two (2) compartments may be removed from service at any one time for repairs or scheduled maintenance. Such repairs or scheduled maintenance shall be performed and such compartments returned to service expeditiously. Should any compartment be removed from service for a period of time that exceeds, or that is expected to exceed, 48 hours, such outage shall be reported promptly to the Cleveland Bureau of Air Pollution Control (Cleveland BAPC). Upon request by the Cleveland BAPC or by the Ohio EPA, the permittee shall submit a written report stating the reason for and expected duration of the outage, and the steps being taken to return the compartment(s) to service as expeditiously as practicable.

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.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible particulate emissions from the stack serving this emissions unit. The presence or absence of any abnormal 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 abnormal visible emissions.

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 abnormal 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 abnormal visible emissions.
4. The permittee shall maintain records on desulfurization operations (day, date, time, tons of metal desulfurized, time taken, ingredients used, number of compartments on line during each desulfurization cycle, time any of the compartments is scheduled and/or taken down for repair or maintenance) and on maintenance and operation of the baghouse, and shall make such records available to the Cleveland Bureau of Air Pollution Control (Cleveland BAPC) and Ohio EPA upon request during normal business hours.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions. Refer to General Term and Condition A.1.c. for the reporting frequency.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any abnormal visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control 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 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 abnormal visible fugitive particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control 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 limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation:

20% opacity as a six-minute average

Applicable Compliance Method(s):

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - 1.b Emission Limitation:

20% opacity as a 3-minute average.

Applicable Compliance Method(s):

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

1.c Emission Limitation:

PE: 21.0 lbs/hr

Applicable Compliance Method:

Compliance shall be based upon using emissions factors derived from material balance calculations for this emissions unit or using results from the most recent stack test.

If required, compliance shall be demonstrated by testing in accordance with OAC rule 3745-17-03(B)(10).

1.d Particulate Emission Limitation:

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 and approximately 2.5 years after permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate of 39.8 pounds particulate per hour.

c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rate:

Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control.

1.e Not later than 30 days prior to the proposed test dates, the permittee shall submit "Intent to Test" notifications to the Cleveland BAPC. The "Intent to Test" notifications shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates 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 Cleveland BAPC's refusal to accept the results of the emission tests.

Personnel from the Cleveland BAPC shall be permitted to witness the tests, 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 each emissions test shall be signed by the person or persons responsible for the tests and submitted to the Cleveland BAPC within 30 days following completion of each test.

1.f Emission Limitation:

Less than 5% opacity from any of the 14 baghouse stacks.

Applicable Compliance Method(s):

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

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 BOF Raw Material Handling (F210)
Activity Description: Scrap, and lime and flux handling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Scrap, lime, and flux raw material handling	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from this emissions unit.
- 2.b The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
 - i. the use of a water spray system capable of supplying an adequate amount of water on material being unloaded to minimize or eliminate the fugitive dust emissions; and
 - ii. the control efficiency of the water spray system shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust to the extent possible with good engineering design.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for unloading operations that are not adequately enclosed, the permittee shall perform inspections of such operations on a daily basis.
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

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

4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitation and control requirement 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 Visible Particulate Emission Limitation:

20% opacity, as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible particulate emission 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). The points of observation for visible particulate emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.
 - 1.b Control Requirement:
RACM - use of water spray system

Applicable Compliance Method:
Compliance shall be determined as specified in OAC rule 3745-17-08(C).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Scrap, lime, and flux raw material handling	None	None

2. Additional Terms 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: LSE - Electrogalvanizing Line (P002)

Activity Description: Premise number: 1318007336;
 Electrogalvanizing line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
LSE - electrogalvanizing line with wet scrubbers vented to mist eliminator	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The particulate emission limitation from this rule is less stringent than the limitation based on OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 0.115 lb/hr.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The scrubber water flow rate shall be continuously maintained at a value of not less than the minimum water flow rate recommended by the manufacturer to ensure proper operation at all times.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly install, operate and maintain equipment to continuously monitor the scrubber water flow rate 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 each day:

- the scrubber water flow rate, in gallons per minute, on a once per shift basis; and
- the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate was not maintained at or above the required level.

If no periods were observed where the scrubber water flow rate deviated from the required level, then the permittee shall submit a report stating so.

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 Particulate Emission Limitation:
0.115 lb/hr

Applicable Compliance Method:

Compliance with the particulate emission limitation of 0.115 lb/hr shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible particulate emission limit in Section A.I.1.

- 1.b Visible Particulate Emission Limitation:
20 percent opacity, as a 6-minute average, except as required by rule

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1). USEPA Method 9 of 40 CFR, Part 60, Appendix A shall be used to determine compliance.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
LSE - electrogalvanizing line with wet scrubbers vented to mist eliminator	None	None

2. Additional Terms 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: LSE - Zinc Reactors (P004)
Activity Description: Premise number: 1318007336;
 Zinc reactors

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
LSE - zinc reactor with wet scrubber	OAC rule 3745-17-11(B)(1)	The particulate emission limitation from this rule is less stringent than the limitation based on OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05(A)(3)	0.36 lb/hr and 1.56 tpy of particulate emissions

2. Additional Terms and Conditions

None

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 olog. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - (a) the color of the emission;
 - (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 had 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 minimize or eliminate the visible particulate emissions. These reports shall be submitted to 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 Particulate Emission Limitation:
0.36 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance with the particulate emission limitation of 0.36 lb/hr shall be determined in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A. No testing is specifically required but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emission limit in Section A.I.1.

- 1.b Visible Particulate Emission Limitation:
20 percent opacity, as a 6-minute average, except as required by rule

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1). USEPA Method 9 of 40 CFR, Part 60, Appendix A shall be used to determine compliance.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
LSE - zinc reactor with wet scrubber	None	None

2. Additional Terms 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: 84" Hot Strip Mill - Reheat Furnace #1 (P046)
Activity Description: Reheat 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
366.7 mm BTU/hr natural gas-fired furnace, with No. 6 fuel oil as a standby, to directly heat steel slabs prior to rolling	OAC rule 3745-17-07(A)(1)	20% opacity, as a six-minute average, except as provided by rule
	OAC rule 3745-17-11(B)(6)	Particulate emissions shall not exceed 19.8 pounds per hour.

2. Additional Terms and Conditions

- 2.a This rule citation reflects the settlement agreement reached between Ohio EPA and the former owner of permittee's facility concerning its appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the former owner of permittee's facility had agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

1. The permittee shall burn only natural gas or No. 6 fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or No. 6 fuel oil, the permittee shall maintain a record of the type and quantity fuel burned in this emissions unit.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No. 6 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

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

1a. Visible Particulate Emission Limitation:
20% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible particulate emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

1.b. Particulate Emission Limitation:
19.8 lbs/hr of particulate emissions

Applicable Compliance Method:

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of this emissions unit (357,800 cu.ft./hr) by the AP-42 emission factor for natural gas (7.6 lbs/mm cu.ft.) and dividing by the maximum hourly input capacity of the emissions unit (366.7 mm BTU/hr). For the use of No. 6 oil, compliance shall be based upon multiplying the maximum hourly oil burning capacity of the emissions unit (2,530 gal/hr) by the AP-42 emission factor for fuel oil (10 lb/10³ gal) and dividing by the maximum hourly heat input capacity of the emissions unit (366.7 mm BTU/hr). If required, compliance shall be demonstrated by testing of emissions unit P046 using Methods 1 through 5 of 40 CFR, Part 60, Appendix A as specified in OAC rule 3745-17-03(B)(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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
366.7 mm BTU/hr natural gas-fired furnace, with No. 6 fuel oil as a standby, to directly heat steel slabs prior to rolling	OAC rule 3745-18-24(N)(5)	1.26 pounds of SO ₂ per million BTU of actual heat input, and a daily average SO ₂ emission rate of 386 lbs of SO ₂ per hour

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

A sulfur content that is sufficient to comply with the allowable SO₂ emission limitation of 1.26 pounds of SO₂/mm Btu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil that was received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

(a) the total quantity of oil received in each shipment (gallons);

(b) the weighted* average SO₂ emission rate (pounds/mm BTU) for the oil received during each calendar month; and

(c) the weighted* average heat content (Btu/gallon) of oil received during each calendar month.

* In proportion to the quantity of oil received in each shipment during the calendar month. These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the SO₂ emission limitations in section B.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. SO₂ Emission Limitation:

1.26 lbs of SO₂/mm BTU of actual heat input

Applicable Compliance Method:

Compliance shall be based on the analytical results of each shipment of oil, using the basis in OAC rule 3745-18-24(N)(5).

1b. SO₂ Emission Limitation:

386 lbs of SO₂/hr

Applicable Compliance Method:

If required, compliance shall be demonstrated by testing pursuant to Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 84" Hot Strip Mill - Reheat Furnace #2 (P047)
Activity Description: Reheat 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
366.7 mm BTU/hr natural gas-fired furnace, with No. 6 fuel oil as a standby, to directly heat steel slabs prior to rolling	OAC rule 3745-17-07(A)(1)	20% opacity, as a six-minute average, except as provided by rule
	OAC rule 3745-17-11(B)(6)	Particulate emissions shall not exceed 19.8 pounds per hour.

2. Additional Terms and Conditions

- 2.a This rule citation reflects the settlement agreement reached between Ohio EPA and the former owner of permittee's facility concerning its appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the former owner of permittee's facility had agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

1. The permittee shall burn only natural gas or No. 6 fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or No. 6 fuel oil, the permittee shall maintain a record of the type and quantity 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 and/or No. 6 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

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

1a. Visible Particulate Emission Limitation:
20% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible particulate emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

1.b. Particulate Emission Limitation:
19.8 lbs/hr of particulate emissions

Applicable Compliance Method:

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of this emissions unit (357,800 cu.ft./hr) by the AP-42 emission factor for natural gas (7.6 lbs/mm cu.ft.) and dividing by the maximum hourly input capacity of the emissions unit (366.7 mm BTU/hr). For the use of No. 6 oil, compliance shall be based upon multiplying the maximum hourly oil burning capacity of the emissions unit (2,530 gal/hr) by AP-42 emission factor for fuel oil (10 lb/10³ gal) and dividing by the maximum hourly heat input capacity of the emissions unit (366.7 mm BTU/hr). If required, compliance shall be demonstrated by testing of emissions unit P047 using Methods 1 through 5 of 40 CFR, Part 60, Appendix A as specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
366.7 mm BTU/hr natural gas-fired furnace, with No. 6 fuel oil as a standby, to directly heat steel slabs prior to rolling	OAC rule 3745-18-24(N)(5)	1.26 pounds of SO ₂ emissions per million BTU of actual heat input, and a daily average SO ₂ emission rate of 386 lbs of SO ₂ /hr

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

A sulfur content that is sufficient to comply with the allowable SO₂ emission limitation of 1.26 pounds of SO₂/mm Btu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

- For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
- The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

- The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil that was received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

(a) the total quantity of oil received in each shipment (gallons);

(b) the weighted* average SO₂ emission rate (pounds/mm BTU) for the oil received during each calendar month; and

(c) the weighted* average heat content (Btu/gallon) of oil received during each calendar month.

* In proportion to the quantity of oil received in each shipment during the calendar month. These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the SO₂ emission limitations in section B.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. SO₂ Emission Limitation:
1.26 lbs of SO₂/mm BTU of actual heat input

Applicable Compliance Method:
Compliance shall be based on the analytical results of each shipment of oil, using the basis in OAC rule 3745-18-24(N)(5).

1b. SO₂ Emission Limitation:
386 lbs of SO₂/hr

Applicable Compliance Method:
If required, compliance shall be demonstrated by testing pursuant to Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 84" Hot Strip Mill - Reheat Furnace #3 (P048)
Activity Description: Reheat 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
366.7 mm BTU/hr natural gas-fired furnace, with No. 6 fuel oil as a standby, to directly heat steel slabs prior to rolling	OAC rule 3745-17-07(A)(1)	20% opacity, as a six-minute average, except as provided by rule
	OAC rule 3745-17-11(B)(6)	Particulate emissions shall not exceed 19.8 pounds per hour.

2. Additional Terms and Conditions

- 2.a This rule citation reflects the settlement agreement reached between Ohio EPA and the former owner of permittee's facility concerning its appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the former owner of permittee's facility had agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

1. The permittee shall burn only natural gas or No. 6 fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or No. 6 fuel oil, the permittee shall maintain a record of the type and quantity fuel burned in this emission unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No. 6 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

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

1a. Visible Particulate Emission Limitation:
20% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible particulate emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

1.b. Particulate Emission Limitation:
19.8 lbs/hr of particulate emissions

Applicable Compliance Method:

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (357,800 cu.ft./hr) by the AP-42 emission factor for natural gas (7.6 lbs/mm cu.ft.) and dividing by the maximum hourly input capacity of the emissions unit (366.7 mm BTU/hr). For the use of No. 6 oil, compliance shall be based upon multiplying the maximum hourly oil burning capacity of the emissions unit (2,530 gal/hr) by the AP-42 emission factor for fuel oil (10 lb/10³ gal) and dividing by the maximum hourly heat input capacity of the emissions unit (366.7 mm BTU/hr). If required, compliance shall be demonstrated by testing of emissions unit P048 using Methods 1 through 5 of 40 CFR, Part 60, Appendix A as specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
366.7 mm BTU/hr natural gas-fired furnace, with No. 6 fuel oil as a standby, to directly heat steel slabs prior to rolling	OAC rule 3745-18-24(N)(5)	1.26 pounds of SO ₂ emissions per million BTU of actual heat input, and a daily average SO ₂ emission rate of 386 lbs of SO ₂ /hr

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

A sulfur content that is sufficient to comply with the allowable SO₂ emission limitation of 1.26 pounds of SO₂/mm Btu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

- For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
- The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

- The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil that was received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

(a) the total quantity of oil received in each shipment (gallons);

(b) the weighted* average SO₂ emission rate (pounds/mm BTU) for the oil received during each calendar month; and

(c) the weighted* average heat content (Btu/gallon) of oil received during the calendar month.

* In proportion to the quantity of oil received in each shipment during the calendar month. These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the SO₂ emission limitations in section B.I.1. of these terms and conditions shall be determined in accordance with the following methods:

SO₂ Emission Limitation:

1.26 lbs of SO₂/mm BTU of actual heat input

Applicable Compliance Method:

Compliance shall be based on the analytical results of each shipment of oil, using the basis in OAC rule 3745-18-24(N)(5).

1b. SO₂ Emission Limitation:

386 lbs of SO₂/hr

Applicable Compliance Method:

If required, compliance shall be demonstrated by testing pursuant to Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 84" Mill Anneal - North (P049)
Activity Description: Annealing furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
80 mmBTU/hr annealing furnace fueled by natural gas to heat steel coils.	OAC 3745-17-07	20% opacity as a six minute average, except as provided by the rule.
	OAC 3745-17-11	Particulate emissions shall not exceed 10.0 lbs per hour.
	OAC 3745-18-24(N)(6)	.024 pounds of sulfur dioxide emissions per million BTU actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall burn only natural gas in this emission unit.

III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas and/or coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in the emission unit.

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s);

1a. Emission Limitation -
20% opacity, as a six minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

1.b. Emission Limitation -
10 lbs/hr of particulate / MMBTU actual heat input.

Applicable Compliance Method -
For the use of natural gas , compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emission unit (78,048.00 cu.ft/hr) by AP-42 emission factor for natural gas (1.9 cu.ft/hr) and dividing by the maximum hourly input capacity of the emissions unit (80 MMBTU/hr).

1.c. Emission Limitation -
.024 lbs of SO₂ / mmBTUactual heat inpt.

Applicable Compliance Method -
Compliance shall be based upon analytical results of each shipment of fuel, using the basis explained in OAC rule 3745-18-24(N)(6) to determine the actual emission rate.

2. **None**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 84" Mill Anneal - South (P050)
Activity Description: Annealing furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
80 mmBTU/hr annealing furnace fueled by natural gas and / or Coke oven gas to heat steel coils.	OAC 3745-17-07	20% opacity as a six minute average, wxcept as provided by rule.
	OAC 3745-17-11	Particulate emissions shall not exceed 10.0 lbs per hour.
	OAC 3745-18-24(N)(6)	.024 pounds of sulfur dioxide emissions per million BTU actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall burn only natural gas in this emission unit.

III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas and/or coke oven gas , the permittee shall maintain a record of the type and quantity of fuel burned in the emission unit.

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s);

1a. Emission Limitation -
20% opacity, as a six minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

1.b. Emission Limitation -
10 lbs/hr of particulate / MMBTU actual heat input.

Applicable Compliance Method -
For the use of natural gas , compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emission unit (78,048.00 cu.ft/hr) by AP-42 emission factor for natural gas (1.9 cu.ft/hr) and dividing by the maximum hourly input capacity of the emissions unit (80 MMBTU/hr).

1.c. Emission Limitation -
.024 lbs of SO₂ / mmBTUactual heat inpt.

Applicable Compliance Method -
Compliance shall be based upon analytical results of each shipment of fuel, using the basis explained in OAC rule 3745-18-24(N)(6) to determine the actual emission rate.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 84" Pickle Line (P051)
Activity Description: Pickling tanks

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
84" Pickle Line and two virgin HCl storage vessels, equipped with a fume scrubber	OAC rule 3745-17-07(A)(1)	20% opacity, as a six-minute average, except as provided by rule
	40 CFR, Part 63, Subpart CCC	HCl concentrations in excess of 18 parts per million, by volume, or an HCl emission rate that corresponds to a collection efficiency of greater than 97 percent
	OAC rule 3745-17-11(B)(1)	The particulate emission limitation from this rule is less stringent than the requirements of Part 63.

2. Additional Terms and Conditions

- 2.a The permittee shall achieve initial compliance with the applicable requirements in 40 CFR, Part 63, Subpart CCC by no later than June 22, 2001.
- 2.b As required by 63.6(e)(3) of Subpart A of 40 CFR, Part 63, the permittee shall develop and implement a written start-up, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the emissions unit during periods of start-up, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.

2. Additional Terms and Conditions (continued)

2.c The permittee shall comply with the operation and maintenance requirements prescribed under 63.6(e) of Subpart A of 40 CFR, Part 63. The permittee shall prepare an operation and maintenance plan for each emission control device to be implemented by no later than the compliance date. The plan shall be incorporated by reference into the permittee's Title V permit. All such plans shall be consistent with good maintenance practices and, for a scrubber emission control device, shall, at a minimum, require the following:

1. Monitoring and recording of the pressure drop across the scrubber shall be performed once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.
2. The manufacturer's recommended maintenance shall be performed 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.
3. Cleaning of the scrubber internals and mist eliminators shall be performed at intervals sufficient to prevent build-up of solids or other fouling.
4. An inspection of each scrubber shall be performed at intervals of no less than 3 months with:
 - a. cleaning or replacement of any plugged spray nozzles or other liquid delivery 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.
5. If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the USEPA Administrator may be used.
6. The permittee shall initiate procedures for corrective action within one 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 maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of this Subpart.
7. The permittee shall maintain a record of each inspection, including each item identified in paragraph A.1.2.c.4. of this section, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

II. Operational Restrictions

1. The permittee shall operate a wet scrubber while this emissions unit is in operation.
2. The permittee shall maintain a minimum scrubber makeup water flow rate that is based on the average of the values recorded during any of the emission test runs during which compliance was demonstrated.
3. The permittee shall provide and operate, except during loading and unloading of acid, a closed vent system for each vessel. 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.

II. Operational Restrictions (continued)

4. Pursuant to Section 63.6(e) of Subpart A of 40 CFR, Part 63, the permittee shall operate and maintain each affected emissions 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 start-up, shutdown, or malfunction. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the start-up, shutdown, and malfunction plan.

III. Monitoring and/or Record Keeping Requirements

1. The permittee may reestablish the minimum water flow rate, as part of any performance test that is conducted subsequent to the initial test.
2. The permittee shall inspect each affected hydrochloric acid storage vessel semiannually to ensure 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.
3. General Record Keeping Requirements
As required by 63.10(b)(2) of Subpart A of 40 CFR, Part 63, the permittee shall maintain records for 5 years from the date of each record of:
 - a. The occurrence and duration of each start-up, 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 start-up, 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 start-up, shutdown, and malfunction plan;
 - e. All information necessary to demonstrate conformance with the start-up, shutdown, and malfunction plan when all actions taken during periods of start-up, 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. This information can be recorded in a checklist or similar form (see 63.10(b)(2)(v) of Subpart A of 40 CFR, Part 63);
 - f. All required measurements needed to demonstrate compliance with the standard and to support data that the emissions unit 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. If the permittee has been granted a waiver from record keeping or reporting requirements under 63.10(f) of Subpart A of this Part, any information demonstrating whether an emissions unit is meeting the requirements for a waiver of record keeping or reporting requirements;
 - i. If the permittee has been granted a waiver from the initial performance test under 63.7(h) of Subpart A of 40 CFR, Part 63, a copy of the full request and the USEPA Administrator's approval or disapproval;
 - j. All documentation supporting initial notifications and notifications of compliance status required by 63.9 of Subpart A of 40 CFR, Part 63; and
 - k. Records of any applicability determination, including supporting analyses.

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

4. Pursuant to 40 CFR, Part 63, Subpart CCC, the permittee shall maintain records for 5 years from the date of each record of:
 - a. scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;
 - b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
 - c. each maintenance inspection and repair, replacement, or other corrective action.
5. 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 USEPA Administrator for the life of the affected emissions unit or until the emissions unit is no longer subject to the provisions of this Subpart. 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 USEPA Administrator for a period of 5 years after each revision to the plan.
6. General records and Subpart CCC records for the most recent two years of operation shall be maintained on site. Records for the previous three years may be maintained off site.
7. The permittee shall properly operate and maintain equipment to continuously monitor the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall collect and record the scrubber water flow rate, in gallons per minute, on a once per shift basis.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all operating events of eight-hour shift averages that are less than the minimum scrubber makeup water flow rate specified above.
2. As required by 63.10(d)(2) of Subpart A of 40 CFR, Part 63, the permittee shall report the results of any performance test as part of the notification of compliance status required in 63.11 of Subpart CCC.
3. As required by 63.10(d)(5)(i) of Subpart A of 40 CFR, Part 63, if actions taken by the permittee during a start-up, shutdown, malfunction of an affected emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the start-up, shutdown, and malfunction plan, the permittee 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.

Any time an action taken by the permittee during a start-up, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the start-up, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii) of Subpart A of 40 CFR, Part 63.

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 Visible Particulate Emission Limitation:
20% opacity, as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

V. Testing Requirements (continued)

- 1.b** HCl Emission Limitation:
18 parts per million, by volume, or an HCl emission rate that corresponds to a collection efficiency of greater than 97 percent

Applicable Compliance Method:

Compliance shall be determined using Method 26A of 40 CFR, Part 60, Appendix A or alternative USEPA approved method. The collection efficiency shall be determined using inlet/outlet testing of the fume scrubber.

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

The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the allowable rate of HCl emissions.

The following test method shall be employed to demonstrate compliance with the allowable mass emission rate: Method 26A of 40 CFR, Part 60, Appendix A for HCl emissions. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
84" Pickle Line and two virgin HCl storage vessels, equipped with a fume scrubber	None	None

2. Additional Terms 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 Slab Caster (P068)
Activity Description: Continuous slab caster

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
BOF continuous casting hot metal transfer tundish	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions of unit shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule. 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.
	OAC rule 3745-17-07(B)(3)	
BOF continuous - casting machine	OAC rule 3745-17-07 (A)(1)	Visible particulate emissions of fugitive dust from this emissions of unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule. 66.78 lbs/hr PM from the continuous casting machine based on Table I.
	OAC rule 3745-17-11(B)	
BOF continuous casting - torch cutting operation	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions of unit shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule. Maintain good operating practices for the torch cutting operation, in order to minimize or eliminate visible particulate emissions of fugitive dust
	OAC rule 3745-17-07(B)	

2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

1.a NONE

III. Monitoring and/or Record Keeping Requirements

- 1.a** The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible particulate emissions from the stack serving this emissions unit. The presence or absence of any abnormal 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 abnormal visible emissions.
- 2.a** The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal 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 abnormal visible emissions.

IV. Reporting Requirements

- 1.a** The permittee shall submit semiannual written reports which (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control by January 31 and July 31 of each year and shall cover the previous 6-month period.
- 2.a** 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 abnormal visible fugitive particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

- 1.a** Compliance with the fugitive dust visible particulate emissions limitations in section A.I.1. of these terms and conditions shall be demonstrated by the methods outlined in OAC rule 3745-17-03(B)(3).
- 2.a** Compliance with the visible particulate emissions limitation from the casting machine in section A.I.1. of these terms and conditions shall be demonstrated by the methods outlined in OAC rule 3745-17-03(B)(1).
- 3.a** Compliance with the lbs/hr. limitation shall be demonstrated as follows:

Lbs/hr. = 0.07 lb/ton of product(EF) X tons of product/hr.

Emission factor from RACM 2.2.3-1.

If testing is required to demonstrate compliance with the allowable emission limitation of 66.78 lbs/hr PM/PM10 from the casting machine then, testing shall be conducted using the following method: Method 5 of 40 CFR 60, Appendix A.

VI. Miscellaneous Requirements

- 1.a** NONE

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
BOF continuous casting hot metal transfer tundish		
BOF continuous - casting machine		
BOF continuous casting - torch cutting operation		

2. Additional Terms and Conditions

- 2.a NONE

II. Operational Restrictions

- 1.a NONE

III. Monitoring and/or Record Keeping Requirements

- 1.a NONE

IV. Reporting Requirements

- 1.a NONE

V. Testing Requirements

- 1.a NONE

VI. Miscellaneous Requirements

- 1.a NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 84" Continuous Anneal Line (P071)
Activity Description: Continuous anneal line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
170 mmBtu/hr natural gas fired continuous anneal line for 84" strip steel, equipped with a demister	OAC 3745-17-07(A)	Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.
	OAC 3745-17-10(B)(1)	0.020 lb of particulate emissions per million Btu actual heat input
	OAC 3745-31-05(PTI#13-1915)	0.4 lb of nitrogen oxide emissions per mmBtu actual heat input or 1.2 times the actual rate (as determined by stack testing)
		0.020 lb of particulate emissions per million Btu actual heat input

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall only burn natural gas in this emissions unit.
2. The permittee shall operate a demister for control of fumes (alkaline mist) during strip cleaning process while this emissions unit is in operation.

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. Emission Limitation -
20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 1.a Emission Limitation -
0.020 lb particulate emissions per mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (165,900 cu.ft/hr) by the AP-42 emission factor for natural gas (1.9 lbs particulate/million cubic feet), and dividing by the maximum hourly heat input capacity of the emissions unit (170 mmBtu/hr).

- 1.b Emission Limitation -
0.4 lb of nitrogen oxide emissions per mmBtu actual heat input or 1.2 times the actual rate determined by stack testing

Applicable Compliance Method

See V.2.

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

The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable rate of nitrogen oxide emissions.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 7 of 40 CFR Part 60, Appendix A for nitrogen oxide emissions. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: LMF (P072)
Activity Description: Ladle metallurgy 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle metallurgy refining process which consists of addition/injection of alloying material in molten metal and electric arc re-heating with (Cantec) baghouse. LMF East.	OAC rule 3745-17-11 (A)	Particulate emissions (PE) shall not exceed 75.67 lbs/hr. See A.I.2.a. and A.I.2.d. below.
	OAC rule 3745-17-07 (A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provide by rule.
	OAC rule 3745-17-07 (B)	Visible PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08 (B)(3)	See A.I.2.c. below.
	OAC rule 3745-31-05 (A) (3) (PTI 13-1957)	20% opacity as a 6-minute average. PE shall not exceed 0.0052 grain per dry standard cubic feet (gr/DSCF) of exhaust gas. 10.5 TPY PE

2. Additional Terms and Conditions

- 2.a The emission limitation required by this applicable rule is less stringent than the emission limitation as determined using best available technology requirements specified in OAC rule 3745-31-05.
- 2.b The baghouse control system shall be operated at sufficient volume flow rate to capture all visible emissions generated by this emissions unit. This limitation is in accordance with OAC rule 3745-31-05 (A) (3) and the federally enforceable Permit to Install #13-1957 which was issued final on June 14, 1989.

2. Additional Terms and Conditions (continued)

2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not limited to, the following:

i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and

ii. 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.

At a minimum, the permittee's employment of RACM shall include the localized hooding over the emissions unit.

2.d The applicable emission limitations are based on Table I of OAC rule 3745-17-11.

II. Operational Restrictions

1. The permittee shall operate the (149,510 ACFM Cantech) baghouse control system to control PE whenever this emissions unit is in operation.

ACFM is actual cubic feet per minute.

2. The pressure drop across the baghouse unit shall be maintained within a range established either during the most recent emission test that demonstrate that the emissions unit was in compliance or by the manufacturer's written recommendation while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install within three (3) months of the effective date of this permit, operate and maintain a continuous differential pressure monitor with recorder which monitors pressure drop across the baghouse, when the emissions unit is in operation. The continuous pressure drop monitor and the recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s) with any modifications deemed necessary by the permittee.

Units for pressure drop shall be in inches of water column.

2. The permittee shall monitor and record the pressure drop across the baghouse, once a shift for each day this emissions unit is in operation.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the range specified above, as well as the corrective actions that were taken to achieve compliance.

2. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following method(s):

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

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

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission 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 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

- 2.** The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons) and the pressure drop (in inches of water column) across the baghouse.

- 3.a** Emission Limitation: 20% opacity as a 6-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 3.b** Emission Limitation: 20% opacity as a 3-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 3.c** Emission Limitation: 0.0052 gr/DSCF PE

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using U.S. EPA Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

- 3.d** Emission Limitation: 75.67 lbs PE/hr

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using U.S. EPA Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

- 3.e** Emission Limitation: 10.5 TPY of PE

Applicable Compliance Method(s):

Compliance with the PE limitation shall be determined in accordance with the following:

$$\text{Tons PE/yr} = A \times B \times 0.005$$

where:

A = particulate emission factor, from the most recent stack test which demonstrated compliance, lbs/ton molten metal charged

B = annual processing rate, tons molten metal charged

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, the Cleveland Bureau of Air Pollution Control and LTV Steel Company, Inc.

Facility Name: **ISG Cleveland Inc**

Facility ID: **13-18-00-1613**

Emissions Unit: **LMF (P072)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: VCP (P073)
Activity Description: Vacuum degassing 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Vacuum degassing facility which consists of alloy or powder injection system, equipped with a Hot Well scrubber and a 2-stage gas burner flare system.	OAC rule 3745-17-07	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. See A.I.2.a. below.
	OAC rule 3745-17-07 (B)	Visible PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08 (B)	See A.I.2.b. below.
	OAC rule 3745-17-11	PE shall not exceed 68.95 lbs/hr. See A.I.2.a. and A.I.2.f. below.
	OAC rule 3745-21-08	See A.I.2.b. and A.I.2.c. below.
	OAC rule 3745-31-05 (A) (3) (PTI 13-1996)	Visible PE shall not exceed 5% opacity, as a 6-minute average; and Carbon monoxide (CO) emissions shall not exceed 15 lbs/hr. See A.I.2.d. below.

2. Additional Terms and Conditions

- 2.a The emission limitation required by this applicable rule is less stringent than the emission limitation as determined using best available technology requirements specified in OAC rule 3745-31-05 (A) (3).
- 2.b The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:
 - (i) The collection efficiency 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; and
 - (ii) The control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot (gr PE/DSCF) of exhaust gases or there are no visible particulate emissions from the exhaust stack(s), whichever is less stringent.
- 2.c Except as otherwise provided in this rule all new stationary carbon monoxide emission sources shall minimize carbon monoxide emissions by use of the best available control techniques and operating practices in accordance with best current technology.

2. Additional Terms and Conditions (continued)

- 2.d** The 2-stage gas burner flare system shall achieve a minimum of 98% by weight reduction of any CO gases generated by this emissions unit. This limitation is in accordance with the Permit to Install 13-1996 which was issued final on February 7, 1990 for a new emissions unit.
- 2.e** The 2-stage gas burner flare system shall be maintained and operated in accordance with U.S. EPA policy.
- 2.f** The applicable emissions limitations are based on Table I of OAC rule 3745-17-11.

II. Operational Restrictions

- 1.** The permittee shall operate the scrubber control system to control PE whenever this emissions unit is in operation.

The pressure drop across the scrubber unit shall be maintained within a range established either during the most recent emission test that demonstrate that the emissions unit was in compliance or by the manufacturer's written recommendation while the emissions unit is in operation.

- 2.** The permittee shall operate the 2-stage gas burner flare control system to control CO emissions whenever this emissions unit is in operation.

A pilot flame shall be maintained at all times in the flare's pilot light burner.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall properly install within six (6) months of the effective date of this permit, operate and maintain a continuous differential pressure monitor which monitors pressure drop across scrubber, when the emissions unit is in operation. The continuous pressure drop monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s) with any modifications deemed necessary by the permittee.

Units for pressure drop shall be in inches of water column.

- 2.** The permittee shall monitor and record the pressure drop across the scrubber, once every hour while this emissions unit is in operation.
- 3.** The permittee shall properly install, operate, and maintain a device to continuously monitor the 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 there was no pilot flame.
- (b) The operating times for the flare, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

- 1.** The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the pressure drop across the scrubber did not comply with the range specified above, as well as the corrective actions that were taken to achieve compliance.
- 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 deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following method(s):

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

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission 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 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

2. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons), the pressure drop (in inches of water column) across the scrubber and the status of the flare pilot flame monitor and the flare pilot flame.

- 3.a Emission Limitation: 20% opacity as a 6-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 3.b Emission Limitation: 20% opacity as a 3-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 3.c Emission Limitation: 5% opacity as a 6-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 3.d Emission Limitation: 0% opacity

Applicable Compliance Method(s):

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 3.e Emission Limitation: 0.030 gr PE/DSCF

Applicable Compliance Method(s):

Compliance with the above emission limitation shall be determined in accordance with U.S. EPA Methods 1 to 5 of 40 CFR Part 60, Appendix A and of OAC rule 3745-17-03(B)(10). If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

3.f Emission Limitation: 15 lbs/hr of CO

Emission Limitation: minimum 98% by weight reduction of any CO gases

Applicable Compliance Method(s):

Compliance with the above emission limitation shall be determined in accordance with U.S. EPA Methods 1 to 4 and 10 or 10B of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and the outlet of the control system) shall be determined by simultaneous testing at the inlet and the outlet of the control system.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 84" Tension Leveler (P074)
Activity Description: Tension leveler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
84" pickle line tension leveler	OAC 3745-31-05(A)(3) (PTI 13-2137)	0.01 grain of particulate emissions per dry standard cubic feet of exhaust gases 1.03 lb/hr of particulate emissions based on 12,000 dry standard cubic feet of exhaust gases per minute 4.51 tpy of particulate emissions
	OAC rule 3745-15-06	Any malfunction of the source or associated air pollution control system shall be reported immediately.
	OAC rule 3745-15-07	Air pollution nuisances originating in this source are prohibited.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed twenty per cent opacity as a six minute average.
	OAC rule 3745-17-11	Equivalent or less stringent than BAT.

2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range recommended by the manufacturer, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Cleveland Bureau of Air Pollution Control (CBAPC) within 6 months after permit issuance.

The permittee may petition the CBAPC for reestablishment of the pressure drop range provided the permittee can demonstrate to the CBAPC's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

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 abnormal visible particulate emissions from the stack serving this emissions unit. The presence or absence of any abnormal 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 abnormal visible emissions.
2. 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, operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis while the emissions unit is in operation.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
2. 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 abnormal visible fugitive particulate emissions. These reports shall be submitted to the CBAPC by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I -General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emissions limitations in section A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
20% opacity as a 6- minute average
Applicable Compliance Method:

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 37-17-03(B)(1).
 - 1.b Emission Limitation:
0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases
1.03 lb/hr of particulate emissions based on 12,000 dry scfm of exhaust gases
4.51 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be determined using Method 5, 40 CFR Part 60, Appendix A.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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84" pickle line tension leveler

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

1. NONE

III. Monitoring and/or Record Keeping Requirements

1. NONE

IV. Reporting Requirements

1. NONE

V. Testing Requirements

1. NONE

VI. Miscellaneous Requirements

1. NONE

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 60" Electroplate (P076)
Activity Description: Electroplating line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
60-inch electroplating line with HCl cleaning	OAC rule 3745-17-11(B)(1)	particulate emissions are limited to 4.0 lbs/hr
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the scrubber shall be continuously maintained at a value of not less than 3.0 inches of water at all times while the emissions unit is in operation.
- The scrubber water flow rate shall be continuously maintained at a value of not less than 107,463 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate 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 each day:

- the pressure drop across the scrubber, in inches of water, on a once per shift basis;
- the scrubber water flow rate, in gallons per minute, on a once per shift basis; and
- the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

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

2. The permittee shall maintain records of the following on a daily basis:
 - (a) the amount of HCl make-up to the scrubber, lbs/hr; and
 - (b) the amount of NaOH make-up to the scrubber, lbs/hr.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - (a) the static pressure drop across the scrubber; and
 - (b) the scrubber water flow rate.

V. Testing Requirements

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

- 1.a Emission Limitation:
4.0 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance with the particulate emissions limit for this emissions unit shall be demonstrated using the following engineering calculations based on the uncontrolled make-up to scrubber, gassing rates and the scrubber efficiency.

HCl: $E1 = \text{production rate (lbs/hr)} \times 0.08 \text{ (gassing rate fraction)} \times \text{scrubber efficiency}$

NaOH: $E2 = \text{production rate (lbs/hr)} \times 0.15 \text{ (gassing rate fraction)} \times \text{scrubber efficiency}$

$E = E1 + E2$

where:

E1 = HCl emissions as particulate

E2 = NaOH emissions as particulate

E = total particulate emissions

Particulate emissions testing shall be performed in accordance with the procedures in 40 CFR, Part 60, Appendix A, Method 5.

- 1.b Visible Particulate Emission Limitation:
20 percent opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1). USEPA Method 9 of 40 CFR, Part 60, Appendix A shall be used to determine compliance.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
60-inch electroplating line with HCl cleaning	None	None

2. Additional Terms 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: Walking Beam Furnace (P265)
Activity Description: Walking beam 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
613 mm Btu/hr natural gas-fired Walking Beam Furnace (West Side Walking Beam Furnace)	OAC rule 3745-31-05(A)(3) (PTI 13-2370)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average. PE shall not exceed 0.02 lb/mm Btu of actual heat input. Nitrogen oxides (NOx) emissions shall not exceed 0.4 lb/mm Btu of actual heat input and 1.2 times the actual rate as determined by testing. See A.I.2.a. below.

2. Additional Terms and Conditions

- 2.a The emissions unit shall be limited to a maximum usage of 2,200,000,000 (2.2 billion) cubic feet of natural gas per rolling 365-day period. This limitation is in accordance with OAC rule 3745-31-05 (A) (3) and Permit to Install 13-2370 which was issued final on March 4, 1992.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.
2. The emissions unit shall be limited to a maximum usage of 2,200,000,000 (2.2 billion) cubic feet of natural gas per rolling, 365-day period.

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 properly install, operate and maintain a natural gas meter which measures the natural gas used in this emissions unit. The gas meter shall be capable of accurately measuring the desired parameter. The gas meter shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s) with any modifications deemed necessary by the permittee.

Units for natural gas usage shall be in cubic feet.

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

3. The permittee shall maintain daily records of the following information:
 - a. the total natural gas usage, in cubic feet;
 - b. the rolling, 365-day summation of the total natural gas usage, in cubic feet; (i.e., the daily value from (a) added to the total natural gas usage for the previous 364-day period); and
 - c. the amount of steel processed in tons.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was used in this emissions unit. Each report shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 365-day natural gas usage limitation.
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements

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

- 1.a Emission Limitation:
20% opacity, as a 6-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible particulate emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- 1.b Emission Limitation:
0.4 lb of NO_x/mm Btu of actual heat input, and 1.2 times the actual rate as determined by testing of this emissions unit

Applicable Compliance Methods:

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate of NO_x emissions: Method 7, 7A, 7B, 7C, or 7D of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- 1.c Emission Limitation:
0.02 lb of PE/mm Btu of actual heat input

Applicable Compliance Methods:

The following equations shall be employed to demonstrate compliance with the allowable mass emission rate of PE:

Actual PE = Emissions factor / Gross heating value = lbs of PE/mm Btu heat input

Emission factor = 1.9 lbs/mm CF natural gas (AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-2, Emission Factor for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion, 7/98)

Gross heating value of natural gas = 1,020 Btu/CF (AP-42, Section 1.4, Natural Gas Combustion, paragraph 1.4.1, General, 7/98)

Actual PE = (1.9 lbs/mm CF) / (1,020 Btu/CF) = 0.0019 lb/mm Btu of actual heat input

V. Testing Requirements (continued)

2. g. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons) of metal (steel) and the natural gas usage (in cubic feet).

The permittee shall conduct or have conducted emission testing to demonstrate compliance with the NOx emission limitation in accordance with the following:

- a. The emission testing shall be conducted within 6 months after issuance of the permit.
- b. The testing shall be conducted using Method 7, 7A, 7B, 7C or 7D of 40 CFR, Part 60, Appendix A.
- c. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.
- e. 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 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.
- f. 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
613 mm Btu/hr natural gas-fired Walking Beam Furnace (West Side Walking Beam Furnace)	None	None

2. Additional Terms 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 Slab Caster (P266)
Activity Description: Continuous slab caster

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hot metal transfer to tundish and continuous slab caster	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)(3)	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
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 six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)	Maintain good operating practices for the torch cutting operation, in order to minimize or eliminate visible particulate emissions of fugitive dust.
Continuous casting operation	OAC rule 3745-17-07(A)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	58.72 lbs/hr PM from the continuous casting machine based on Table I.

2. Additional Terms and Conditions

2.a none

II. Operational Restrictions

1.a none

III. Monitoring and/or Record Keeping Requirements

- 1.a** The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible particulate emissions from the stack serving this emissions unit. The presence or absence of any abnormal 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 abnormal visible emissions.
- 2.a** The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal 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 abnormal visible emissions.

IV. Reporting Requirements

- 1.a** The permittee shall submit semiannual written reports which (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control by January 31 and July 31 of each year and shall cover the previous 6-month period
- 2.a** 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 abnormal visible fugitive particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

- 1.a** Compliance with the fugitive dust visible particulate emissions limitations in section A.I.1. of these terms and conditions shall be demonstrated by the methods outlined in OAC rule 3745-17-03(B)(3).
- 2.a** Compliance with the visible particulate emissions limitation from the casting machine in section A.I.1. of these terms and conditions shall be demonstrated by the methods outlined in OAC rule 3745-17-03(B)(1).
- 3.a** Compliance with the lbs/hr. limitation shall be demonstrated as follows:

$$\text{Lbs/hr} = 0.07 \text{ lb/ton of product(EF) X tons of product/hr.}$$

Emission factor from RACM 2.2.3-1.

If testing is required to demonstrate compliance with the allowable emission limitation of 58.72 lbs/hr PM/PM10 from the casting machine then, testing shall be conducted using the following method: Method 5 of 40 CFR 60, Appendix A.

VI. Miscellaneous Requirements

- 1.a** NONE

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hot metal transfer to tundish and continuous slab caster		
Continuous casting - torch cutting operation		
Continuous casting operation		

2. Additional Terms and Conditions

- 2.a none

II. Operational Restrictions

- 1.a none

III. Monitoring and/or Record Keeping Requirements

- 1.a none

IV. Reporting Requirements

- 1.a none

V. Testing Requirements

- 1.a none

VI. Miscellaneous Requirements

- 1.a none

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: LMF (P267)

Activity Description: Ladle metallurgy 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle metallurgy refining process which consists of addition/injection of alloying material in molten metal and electric arc re-heating with (Wheelabrator) baghouse. LMF West.	OAC rule 3745-17-11 (A)	Particulate emissions (PE) shall not exceed 61.77 lbs/hr. See A.I.2.a. and A.I.2.d. below.
	OAC rule 3745-17-07	Visible PE shall not exceed 20% opacity, as a 6-minute average See A.I.2.a. below.
	OAC rule 3745-17-07 (B)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 3-minute average See A.I.2.a. below.
	OAC rule 3745-17-08 (B)(3)	PE shall not exceed 0.0052 grain per dry standard cubic feet (gr/DSCF) of exhaust gases.
	OAC rule 3745-31-05 (A) (3) (PTI 13-2370)	PE shall not exceed 4.51 lbs/hr Visible PE shall not exceed 5% opacity, as a 6-minute average. See A.I.2.b. below.

2. Additional Terms and Conditions

- 2.a The emission limitation required by this applicable rule is less stringent than the emission limitation as determined using best available technology requirements specified in OAC rule 3745-31-05.
- 2.b The baghouse control system shall be operated at sufficient volume flow rate to capture all visible emissions generated by this emissions unit. This limitation is in accordance with OAC rule 3745-31-05 (A) (3) and the Permit to Install 13-2370 which was issued final on March 4, 1992.
- 2.c If the permittee can demonstrate compliance with the visible emissions restriction, PE grain loading concentration limitation and PE mass emission limitation contained in section A.I.1. above, then the baghouse is deemed to be operated with sufficient volume flow rate to capture all visible emissions generated by this emissions unit.
- 2.d The applicable emission limitation are based Table I of OAC rule 3745-17-11.

II. Operational Restrictions

1. The permittee shall operate the (Wheelabrator) baghouse control system to control PE whenever this emissions unit is in operation.

The pressure drop across the baghouse unit shall be maintained within a range established either during the most recent emission test that demonstrate that the emissions unit was in compliance or by the manufacturer's written recommendation while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install within six (6) months of the effective date of this permit, operate and maintain a continuous differential pressure monitor with recorder which monitors pressure drop across the baghouse, when the emissions unit is in operation. The continuous pressure drop monitor and the recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s) with any modifications deemed necessary by the permittee.

Units for pressure drop shall be in inches of water column.

2. The permittee shall monitor and record the pressure drop across the baghouse, once a shift for each day this emissions unit is in operation.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Sections A.1.1 and A.1.2 of these terms and conditions shall be determined in accordance with the following method(s):

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

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission 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 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

2. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons) and the pressure drop across the baghouse (in inches of water column).

V. Testing Requirements (continued)

3.a Emission Limitation: 20% opacity as a 3-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

3.b Emission Limitation: 5% opacity as a 6-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

3.c Emission Limitation: 0.0052 gr PE/DSCF of exhaust gases

Emission Limitation: 4.51 lbs PE/hr

Applicable Compliance Method(s):

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U.S. EPA Methods 1 through 5 and the method(s) and procedures pursuant to OAC rule 3745-17-03 (B) (10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Central WWTP (P268)
Activity Description: Lime silo with baghouse

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Lime silo with baghouse	OAC rule 3745-17-07 (A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provide by rule.
	OAC rule 3745-17-07 (B)	Visible PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08 (B)(3)	See A.I.2.a. below.
	OAC rule 3745-17-11 (A)	PE shall not exceed 30.51 lbs/hr. See A.I.2.b. below.

2. Additional Terms and Conditions

- 2.a The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:
 - (a) The collection efficiency 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; and
 - (b) 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 applicable emission limitations are based on Table I of OAC rule 3745-17-11.
- 2.c The baghouse control system shall be operated at sufficient volume flow rate to capture all visible emissions generated by this emissions unit. The volume flow rate shall be considered adequate if visible PE of fugitive dust do not exceed 20% opacity, as a 3-minute average.

II. Operational Restrictions

1. The permittee shall operate the baghouse control system to control PE whenever this emissions unit is in operation.
2. The pressure drop across the baghouse unit shall be maintained within a range established either during the most recent emission test that demonstrate that the emissions unit was in compliance or by the manufacturer's written recommendation while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install within three (3) months of the effective date of this permit, operate and maintain a continuous differential pressure monitor with recorder which monitors pressure drop across the baghouse, when the emissions unit is in operation. The continuous pressure drop monitor and the recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s) with any modifications deemed necessary by the permittee.

Units for pressure drop shall be in inches of water column.

2. The permittee shall monitor and record the pressure drop across the baghouse, once a shift for each day this emissions unit is in operation.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Sections A.1.1 and A.1.2 of these terms and conditions shall be determined in accordance with the following method(s):

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

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission 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 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

2. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons) and the pressure drop (in inches of water column) across the baghouse.

- 3.a Emission Limitation: 20% opacity as a 6-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 3.b Emission Limitation: 20% opacity as a 3-minute average

Applicable Compliance Method(s):

Compliance shall be determined through visible observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

V. Testing Requirements (continued)

3.c Emission Limitation: 0.030 gr/DSCF PE

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using U.S. EPA Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

3.d Emission Limitation: 30.51 lbs PE/hr

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using U.S. EPA Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Continuous Push/Pull Pickle Line (P269)
Activity Description: Continuous Push/Pull Pickle Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Continuous Push/Pull Pickle Line and three virgin HCl storage vessels, equipped with a fume scrubber and mist eliminator	OAC rule 3745-17-07(A)(1)	20% opacity, as a six-minute average, except as provided by rule
	40 CFR, Part 63, Subpart CCC	HCl concentrations in excess of 18 parts per million, by volume, or an HCl emission rate that corresponds to a collection efficiency of greater than 97 percent
	OAC rule 3745-31-05(A)(3) (PTI #13-3028)	0.204 lb/hr of HCl emissions

2. Additional Terms and Conditions

- 2.a The permittee shall achieve initial compliance with the applicable requirements in 40 CFR, Part 63, Subpart CCC by no later than June 22, 2001.
- 2.b As required by 63.6(e)(3) of Subpart A of 40 CFR, Part 63, the permittee shall develop and implement a written start-up, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the emissions unit during periods of start-up, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.

2. Additional Terms and Conditions (continued)

- 2.c** The permittee shall comply with the operation and maintenance requirements prescribed under 63.6(e) of Subpart A of 40 CFR, Part 63. The permittee shall prepare an operation and maintenance plan for each emission control device to be implemented by no later than the compliance date. The plan shall be incorporated by reference into the permittee's Title V permit. All such plans shall be consistent with good maintenance practices and, for a scrubber emission control device, shall, at a minimum, require the following:
1. Monitoring and recording of the pressure drop across the scrubber shall be performed once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.
 2. The manufacturer's recommended maintenance shall be performed 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.
 3. Cleaning of the scrubber internals and mist eliminators shall be performed at intervals sufficient to prevent build-up of solids or other fouling.
 4. An inspection of each scrubber shall be performed at intervals of no less than three months with:
 - a. cleaning or replacement of any plugged spray nozzles or other liquid delivery 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 ex-changer 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.
 5. If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the USEPA Administrator may be used.
 6. The permittee shall initiate procedures for corrective action within one 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 maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of this Subpart.
 7. The permittee shall maintain a record of each inspection, including each item identified in paragraph A.1.2.c.4. of this section, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

II. Operational Restrictions

1. The permittee shall operate the wet scrubber while this emissions unit is in operation.
2. The permittee shall maintain a minimum scrubber makeup water flow rate that is based on the average of the values recorded during any of the emission test runs during which compliance was demonstrated.
3. The permittee shall provide and operate, except during loading and unloading of acid, a closed vent system for each vessel. 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.

II. Operational Restrictions (continued)

4. Pursuant to Section 63.6(e) of Subpart A of 40 CFR, Part 63, the permittee shall operate and maintain each affected emissions 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 start-up, shutdown, or malfunction. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the start-up, shutdown, and malfunction plan.

III. Monitoring and/or Record Keeping Requirements

1. The permittee may reestablish the minimum water flow rate, as part of any performance test that is conducted subsequent to the initial test.
2. The permittee shall inspect each affected hydrochloric acid storage 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.
3. General Record Keeping Requirements
As required by 63.10(b)(2) of Subpart A of 40 CFR, Part 63, the permittee shall maintain records for 5 years from the date of each record of:
 - a. The occurrence and duration of each start-up, 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 start-up, 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 start-up, shutdown, and malfunction plan;
 - e. All information necessary to demonstrate conformance with the start-up, shutdown, and malfunction plan when all actions taken during periods of start-up, 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. This information can be recorded in a checklist or similar form (see 63.10(b)(2)(v) of Subpart A of 40 CFR, Part 63);
 - f. All required measurements needed to demonstrate compliance with the standard and to support data that the emissions unit 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. If the permittee has been granted a waiver from record keeping or reporting requirements under 63.10(f) of Subpart A of this Part, any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;
 - i. If the permittee has been granted a waiver from the initial performance test under 63.7(h) of Subpart A of 40 CFR, Part 63, a copy of the full request and the Administrator's approval or disapproval;
 - j. All documentation supporting initial notifications and notifications of compliance status required by 63.9 of Subpart A of 40 CFR, Part 63; and
 - k. Records of any applicability determination, including supporting analyses.

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

4. Pursuant to 40 CFR, Part 63, Subpart CCC, the permittee shall maintain records for 5 years from the date of each record of:
 - a. Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;
 - b. Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
 - c. Each maintenance inspection and repair, replacement, or other corrective action.
5. 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 Administrator for the life of the affected emissions unit or until the emissions unit is no longer subject to the provisions of this subpart. 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 USEPA Administrator for a period of 5 years after each revision to the plan.
6. General records and Subpart CCC records for the most recent two years of operation shall be maintained on site. Records for the previous three years may be maintained off site.
7. The permittee shall properly operate and maintain equipment to continuously monitor the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall collect and record the scrubber water flow rate, in gallons per minute, on a once per shift basis.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all operating events of eight-hour shift averages that are less than the minimum scrubber makeup water flow rate specified above.
2. As required by 63.10(d)(2) of Subpart A of 40 CFR, Part 63, the permittee shall report the results of any performance test as part of the notification of compliance status required in 63.11 of Subpart CCC.
3. As required by 63.10(d)(5)(i) of Subpart A of 40 CFR, Part 63, if actions taken by the permittee during a start-up, shutdown, malfunction of an affected emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the start-up, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

Any time an action taken by the permittee during a start-up, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the start-up, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii) of Subpart A of 40 CFR, Part 63.

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 Visible Particulate Emission Limitation:
20% opacity, as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined by visible particulate emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

V. Testing Requirements (continued)

- 1.b** HCl Emission Limitation -
18 parts per million by volume or an HCl emission rate that corresponds to a collection efficiency of greater than 97 percent

Applicable Compliance Method:

Compliance shall be determined using Method 26A of 40 CFR, Part 60, Appendix A or alternative USEPA approved method. The collection efficiency shall be determined using inlet/outlet testing of the fume scrubber.

- 1.c** HCl Emission Limitation:
0.204 lb/hr of HCl emissions

Applicable Compliance Method:

Compliance shall be determined using Method 26A of 40 CFR, Part 60, Appendix A or alternative USEPA approved method.

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

The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable rate of HCL emissions.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 26A of 40 CFR Part 60, Appendix A for HCL emissions. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Continuous Push/Pull Pickle Line and three virgin HCl storage vessels, equipped with a fume scrubber and mist eliminator	None	None

2. Additional Terms 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: Blast Furnace C5 (P903)
Activity Description: Blast furnace ironmaking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast Furnace Iron Making which consists of blast furnace charging, iron ore reduction, stoves, cast house operation, built-in Venturi scrubber, bleeders, flue dust storage and flue dust handling with a Passive Emission Control (PEC) system and a ground flare. Blast Furnace C-5.	OAC rule 3745-17-07 (A)	20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07 (B) (1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08 (B) (3)	See A.I.2.a. below.
	OAC rule 3745-17-11	PE shall not exceed 67.39 lbs/hr.
Blast furnace cast house	OAC rule 3745-17-07 (B) (3)	20% opacity as a six-minute average, except as provided by rule.
Fuel burning equipment which is fired only with blast furnace gas or any mixture of blast furnace gas with other gaseous fuels and/or number two fuel oil	OAC rule 3745-17-10 (B) (1)	PE shall not exceed 0.04 lb/mm Btu of actual heat input.
The stove stacks associated with P903, Blast Furnace C-5 and P904, Blast Furnace C-6	OAC rule 3745-17-12 (P) (5)	PE shall not exceed 11.7 lbs/hr for each source.
P903, Blast Furnace C-5 stoves and P904, Blast Furnace C-6 stoves	40 CFR Part 52, 52.1881 (b) (15) (xi) (I)	Sulfur dioxide (SO ₂) emissions shall not exceed 0.15 lb/mmBtu of actual heat input.
Blast Furnace C-5 cast house operations	OAC rule 3745-31-05 (A) (3) (PTI 13-2122)	Particulate matter (PM) shall not exceed 3.14 lbs/hr. See A.I.2.c., A.I.2.d. and A.I.2.e below.

2. Additional Terms and Conditions

- 2.a The installation and use of hoods over the tap area, covers over the hot metal and slag runners, gas and/or steam suppression at the bottle car loading is to minimize or eliminate visible particulate emissions of fugitive dust.

2. Additional Terms and Conditions (continued)

- 2.b** Visible PE from the cast house shall not exceed 15% opacity on a six-minute rolling average basis, except for the six-minute periods which include the tap hole drilling or plugging operation or oxygen lancing operation, which shall not exceed 20% opacity on a six-minute rolling average basis provided that the times these operations took place are recorded and a summary is available for review during normal business hours.

Any other operations that exceed 15% opacity or any operations that exceed 20% opacity should be reported in accordance with OAC rule 3745-15-06 (B) including estimates (to the best extent possible) of the quantities of air contaminants which have been or may have been emitted into the ambient air.

This limitation is in accordance with OAC rule 3745-31-05 (A) (3) and the Permit to Install 13-2122 which was issued final on January 24, 1991.

- 2.c** The PEC system (or Passive Emission Suppression system) shall be maintained and operated during each cast so as to minimize or eliminate visible emission of fugitive dust as required in the Permit to Install 13-2122.
- 2.d** Visible PE readings by a certified reader shall be made of 3 consecutive daylight casts during each (calendar) quarter in which this Blast Furnace (C-5) is operated to demonstrate compliance with the opacity limits. These compliance demonstrations shall conform with the procedures as detailed in the Permit to Install 13-2122.
- 2.e** The Cleveland Bureau of Air Pollution Control shall be notified in writing at least 7 (seven) days prior to these demonstrations so that these demonstrations can be observed and/or monitored (as necessary).
- 2.f** The ground flare system shall be maintained and operated in accordance with U.S. EPA policy.

II. Operational Restrictions

- 1.** The permittee shall operate the ground flare control system to control CO whenever this emissions unit is in operation.
- A pilot flame shall be maintained at all times in the flare's pilot light burner. A flame presence sensor and a (an exhaust) gas monitoring and recording equipment shall be operational while the flare is in operation.
- 2.** The PEC system (or Passive Emission Suppression system) shall be used to control PE generated by the cast house operation.
- a. The trough area hood enclosure which shall be in place within 60 seconds after completion of the tap hole opening and remain in place until the plugging operation begins;
- b. The permanent hot iron and slag runner covers which shall be in place at all times during each cast;
- 3.** c. Kaowool blankets and/or sand shall be used to cover and/or seal the non-permanently covered runner opening and the various permanent section junction leaks (in accordance with industry safety standards);
- d. Steam and/or natural gas lances shall be used to reduce emissions from the tap hole (during drilling and plugging), iron receiving car(s), the end of the slag runner and any other non-permanently covered runner openings; and
- e. Spare trough cover and spare iron and slag runner covers shall be made readily available so they can be replaced between casts.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall install within six (6) months of the effective date of this permit, calibrate, operate, and maintain, in good working condition, system(s) of monitor(s), in accordance with the manufacturers' recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee. The monitoring device(s) shall be capable of accurately measuring the desired parameter(s) whenever this emissions unit is in operation.

The permittee shall install within six (6) months of the effective date of this permit, calibrate, operate, and maintain, in good working condition, system(s) of recorder(s), in accordance with the manufacturers' recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee. The recording device(s) shall be capable of accurately recording the desired parameter(s) whenever this emissions unit is in operation.

Units for gas volume flow rate is in cubic feet per minute. Units for exhaust gas volume flow rate is in cubic feet per minute. The flare flame presence shall be either yes or no. Units for the amount of gaseous fuel used in fuel burning equipment shall be in cubic feet per hour. Units for analyses of gaseous fuel used in fuel burning equipment shall be in percent by weight.

2. The permittee shall collect and record on a daily basis the following parameters whenever this emissions unit is in operation:
 - a. The dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as an iron car overflow, a slag pit eruption or bleeder opening during upset or slip, etc.;
 - b. The dates and identification numbers of casts during which a trough hood and/or iron or slag runner cover was not available or used;
 - c. The (John Zink Company) flare (exhaust) gas flow monitoring and recording equipment shall identify the following:
 - i. the time of day;
 - ii. the (exhaust) gas flow rate; and
 - iii. the start and stop time of each tapping operation and of each use of the flare.
 - d. The dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as iron car overflow, a slag pit eruption or bleeder opening during upset or slip, etc.;
 - e. The dates and identification number of casts during which a trough hood and/or iron or slag runner cover was not available or used;
 - f. The total number of casts during a calendar quarter; and
 - g. The type of fuel and the amount of the fuel used in fuel burning equipment and the sampling and the analyses of fuel used in this emissions unit in a calendar quarter.
3. The permittee shall collect and record on a calendar quarterly basis the following parameters whenever this emissions unit is in operation:

Visible PE readings by a certified reader shall be made of 3 consecutive daylight casts during each calendar quarter in which this emissions unit is operated to demonstrate compliance with the opacity limits. The visible PE readers shall be certified in accordance with Reference Method 9 of 40 CFR 60, Appendix A.

IV. Reporting Requirements

1. A one time report shall be submitted describing the fixed and movable PEC system (or Passive Emission Suppression system) which will be utilized at this cast house, including a diagram detailing the location and areas which will be "permanently" covered, and a description of the procedure to control the "non-permanently" covered areas.

This one time report shall be submitted to the Cleveland Bureau of Air Pollution Control within 6 (six) months of the effective date of this permit.

IV. Reporting Requirements (continued)

- 2.** The permittee shall submit quarterly written reports which identify all deviations (excursions), exceedance(s) and non-compliance time periods of the following unless specified otherwise below:
 - a. The visible PE demonstrations, a summary of the trough hood usage, a summary of exceedances of the 15% and 20% six-minute rolling average limitation, and a summary of the estimated amounts of material released (to the best extent possible) from the cast house during each exceedance;
 - b. The dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as an iron car overflow, a slag pit eruption or bleeder opening during upset or slip, etc.;
 - c. The dates and identification numbers of casts during which a trough hood and/or iron or slag runner cover was not available or used;
 - d. The total number of casts during a calendar quarter;
 - e. The type of fuel and the amount of the fuel used in fuel burning equipment and the sampling and the analyses of fuel used in this emissions unit in a calendar quarter; and
 - f. All periods of time when the flare was not functioning while the emissions unit was in operation.
- 3.** The deviation (excursion) reports and the visible emission quarterly reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
- 4.** All reports shall be submitted to the Cleveland Bureau of Air Pollution Control.

V. Testing Requirements

- 1.** Compliance with the emission limitation(s) in Sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following method(s):

The emission testing shall be conducted within 6 months after issuance of the permit.
- 1.a** Emission Limitation: 20% opacity, as a 6-minute average

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).
- 1.b** Emission Limitation: 20% opacity, as a 3-minute average from any fugitive dust emission points including but not limited to emissions from flue dust storage and flue dust handling.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).
- 1.c** Emission Limitation: 20% opacity, as a 6-minute average for the blast furnace cast house

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).
The visible emission reader shall make and record opacity readings at 15 second intervals.

The observation of each cast shall begin with the opening of the tap hole and conclude when the hot metal or slag ceases to flow into the torpedo (iron receiving) cars or slag pit, respectively, whichever occurs later.

Readings shall be made of emissions at either the roof monitor or another point in the building whichever is more opaque at any instant.

V. Testing Requirements (continued)

1.d Emission Limitation: 67.39 lbs PE/hr

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

1.e Emission Limitation: 0.04 lb PE/mm Btu of actual heat input for fuel burning equipment

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (9) using Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

1.f Emission Limitation: 11.7 lbs PE/hr for blast furnace stoves

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

1.g Emission Limitation: 0.15 lb SO₂/mm Btu of actual heat input for each blast furnace stove

Applicable Compliance Methods:

OAC rule 3745-18-04 (A) using Methods 1 through 4 and 6, 6A, 6B, or 6C of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

1.h Emission Limitation: 15% opacity, as a 6-minute rolling average except for tap hole drilling or plugging operation or oxygen lancing operation

Emission Limitation: 20% opacity, as a 6-minute rolling average for tap hole drilling or plugging operation or oxygen lancing operation

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1) except that each minute starts a new six-minute rolling average. If visible emissions are being emitted from roof monitors and other non-stack type discharge points from the building, the reader shall record whatever plume is most opaque.

During each compliance demonstration cast, the permittee shall operate the blast furnace and cast house in a manner representative of actual operating conditions. Furnace production should be at least as great as the average production rate of the three calendar months immediately preceding the test period, in terms of tons of hot metal per cast (should the furnace production be less than this average, detailed information justifying the lower production must be included in the quarterly report).

The permittee shall provide at least 2 visible emission observers. One observer (the "outside observer") shall observe and record the visible emissions that exit the cast house. At least one observer (the "inside observer") shall be situated inside the cast house operations, consistent with the safety of the observer(s). Any outside observers shall be certified in accordance with Method 9.

The observation of each cast shall begin with the opening of the tap hole and conclude when the hot metal or slag ceases to flow into the torpedo cars or slag pit, respectively, whichever occurs later.

V. Testing Requirements (continued)

The inside observer(s) shall record, at a minimum, the following:

- i. The start and stop times of cast house operations that may affect the quantity of emissions that escape the cast house.
- ii. The qualitative magnitude of emissions from cast house operations (e.g. light, medium, heavy)
- iii. Description of out-of-the-ordinary occurrence (such as torpedo car overfilling) and the quantitative magnitude of emissions caused.
- iv. The qualitative capture efficiency of the trough hood (e.g. excellent, good, fair, poor).
- v. A description of the control techniques employed, including whether torpedo cars have dark spots (cold areas).
- vi. Operating parameters such as:
 - . (a) drill size;
 - . (b) tons of hot metal cast;
 - . (c) sulfur content of the hot metal;
 - . (d) furnace hot blast pressure;
 - . (e) furnace checking practice;
 - . (f) furnace wind rate.

The outside observer shall make and record opacity readings at 15 second intervals. Readings shall be made of emissions at either the roof monitor or the space between the cast house and blast furnace, whichever is more opaque at any instant.

For each cast, overlapping six minute opacity averages (averages of 24 consecutive opacity readings, moving at one minute intervals) shall be determined. The data set for each cast shall consist of all six-minute averages so determined. Opacity readings immediately preceding or following one or more interferences shall be deemed to be consecutive.

2. Heat content, gross heating value or gross calorific value of gaseous fuel in Btu/CF (British thermal unit per cubic foot)

The following test method(s) shall be employed:

OAC rule 3745-17-03, Measurement methods and procedures, paragraph (B) (9) (b), the heat content of fuels shall be determined according to "ASTM Standards "D1826" for gaseous fuels where applicable. For gaseous fuels to which "D1826" does not apply, "D900" shall be used.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA. The State may utilize the services of any private laboratory to conduct the testing in accordance with ASTM standards.

3. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons) of raw material charged, the gaseous fuel usage (in cubic feet per hour) and whether the flare was operating or not.
4. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

V. Testing Requirements (continued)

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 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. The permittee shall comply with the requirements of 40 CFR, Part 63, Subpart FFFFF as specified in Attachment A of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Blast Furnace C6 (P904)
Activity Description: Blast furnace ironmaking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast Furnace Iron Making which consists of blast furnace charging, iron ore reduction, stoves, cast house operation, built-in Venturi scrubber, bleeders, flue dust storage and flue dust handling with a Passive Emission Control (PEC) system and a ground flare. Blast Furnace C-6.	OAC rule 3745-17-07 (A)	20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07 (B) (1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08 (B) (3) OAC rule 3745-17-11	See A.I.2.a. below. PE shall not exceed 67.03 lbs/hr.
Blast furnace cast house	OAC rule 3745-17-07 (B) (3)	20% opacity as a six-minute average, except as provided by rule.
Fuel burning equipment which is fired only with blast furnace gas or any mixture of blast furnace gas with other gaseous fuels and/or number two fuel oil	OAC rule 3745-17-10 (B) (1)	PE shall not exceed 0.04 lb/mm Btu of actual heat input.
The stove stacks associated with P903, Blast Furnace C-5 and P904, Blast Furnace C-6	OAC rule 3745-17-12 (P) (5)	PE shall not exceed 11.7 lbs/hr for each source.
P903, Blast Furnace C-5 stoves and P904, Blast Furnace C-6 stoves	40 CFR Part 52, 52.1881 (b) (15) (xi) (I)	Sulfur dioxide (SO ₂) emissions shall not exceed 0.15 lb/mm Btu of actual heat input.

2. Additional Terms and Conditions

- 2.a** The installation and use of hoods over the tap area, covers over the hot metal and slag runners, gas and/or steam suppression at the bottle car loading is to minimize or eliminate visible particulate emissions of fugitive dust.
- 2.b** The ground flare system shall be maintained and operated in accordance with U.S. EPA policy.

II. Operational Restrictions

1. The permittee shall operate the ground flare control system to control CO whenever this emissions unit is in operation.

A pilot flame shall be maintained at all times in the flare's pilot light burner. A flame presense sensor and a (an exhaust) gas monitoring and recording equipment shall be operational while the flare is in operation.
2. The PEC system (or Passive Emission Suppression system) shall be used to control PE generated by the cast house operation.
 - a. The trough area hood enclosure which shall be in place within 60 seconds after completion of the tap hole opening and remain in place until the plugging operation begins;
 - b. The permanent hot iron and slag runner covers which shall be in place at all times during each cast;
 - c. Kaowool blankets and/or sand shall be used to cover and/or seal the non-permanently covered runner opening and the various permanent section junction leaks (in accordance with industry safety standards);
 - d. Steam and/or natural gas lances shall be used to reduce emissions from the tap hole (during drilling and plugging), iron receiving car(s), the end of the slag runner and any other non-permanently covered runner openings; and
 - e. Spare trough cover and spare iron and slag runner covers shall be made readily available so they can be replaced between casts.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall install within six (6) months of the effective date of this permit, calibrate, operate, and maintain, in good working condition, system(s) of monitor(s), in accordance with the manufacturers' recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee. The monitoring device(s) shall be capable of accurately measuring the desired parameter(s) whenever this emissions unit is in operation.

The permittee shall install within six (6) months of the effective date of this permit, calibrate, operate, and maintain, in good working condition, system(s) of recorder(s), in accordance with the manufacturers' recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee. The recording device(s) shall be capable of accurately recording the desired parameter(s) whenever this emissions unit is in operation.

Units for gas volume flow rate is in cubic feet per minute. Units for exhaust gas volume flow rate is in cubic feet per minute. The flare flame presence shall be either yes or no. Units for the amount of gaseous fuel used in fuel burning equipment shall be in cubic feet per hour. Units for analyses of gaseous fuel used in fuel burning equipment shall be in percent by weight.

2. The permittee shall collect and record on a daily basis the following parameters whenever this emissions unit is in operation:
 - a. The dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as an iron car overflow, a slag pit eruption or bleeder opening during upset or slip, etc.;
 - b. The dates and identification numbers of casts during which a trough hood and/or iron or slag runner cover was not available or used;
 - c. The (John Zink Company) flare (exhaust) gas flow monitoring and recording equipment shall identify the following:
 - i. the time of day;
 - ii. the (exhaust) gas flow rate; and
 - iii. the start and stop time of each tapping operation and of each use of the flare.

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

- d. The dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as iron car overflow, a slag pit eruption or bleeder opening during upset or slip, etc.;
- e. The dates and identification number of casts during which a trough hood and/or iron or slag runner cover was not available or used;
- f. The total number of casts during a calendar quarter; and
- g. The type of fuel and the amount of the fuel used in fuel burning equipment and the sampling and the analyses of fuel used in this emissions unit in a calendar quarter.

3. The permittee shall collect and record on a calendar quarterly basis the following parameters whenever this emissions unit is in operation:

Visible PE readings by a certified reader shall be made of one daylight cast during each calendar quarter in which this emissions unit is operated to demonstrate compliance with the opacity limits. The visible PE readers shall be certified in accordance with Reference Method 9 of 40 CFR 60, Appendix A.

IV. Reporting Requirements

1. A one time report shall be submitted describing the fixed and movable PEC system or Passive Emission Suppression system which will be utilized at this cast house, including a diagram detailing the location and areas which will be "permanently" covered, and a description of the procedure to control the "non-permanently" covered areas.

This one time report shall be submitted to the Cleveland Bureau of Air Pollution Control within 6 (six) months of the effective date of this permit.

2. The permittee shall submit quarterly written reports which identify all deviations (excursions), exceedance(s) and non-compliance time periods of the following unless specified otherwise below:
- a. The visible PE demonstrations, a summary of the trough hood usage and a summary of exceedances of the 20% six-minute average limitation;
 - b. The dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as an iron car overflow, a slag pit eruption or bleeder opening during upset or slip, etc.;
 - c. The dates and identification numbers of casts during which a trough hood and/or iron or slag runner cover was not available or used;
 - d. The total number of casts during a calendar quarter;
 - e. The type of fuel and the amount of the fuel used in fuel burning equipment and the sampling and the analyses of fuel used in this emissions unit in a calendar quarter; and
 - f. All periods of time when the flare was not functioning while the emissions unit was in operation.
3. The deviation (excursion) reports and the visible emission quarterly reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Cleveland Bureau of Air Pollution Control.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following method(s):

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

V. Testing Requirements (continued)

- 1.a** Emission Limitation: 20% opacity, as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 1.b** Emission Limitation: 20% opacity, as a 3-minute average from any fugitive dust emission points including but not limited to emissions from flue dust storage and flue dust handling.

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

- 1.c** Emission Limitation: 67.03 lbs PE/hr

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

- 1.d** Emission Limitation: 0.04 lb PE/mm Btu of actual heat input for fuel burning equipment

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (9) using Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

- 1.e** Emission Limitation: 11.7 lbs PE/hr for blast furnace stoves

Applicable Compliance Methods:

OAC rule 3745-17-03 (B) (10) using Methods 1 through 5 of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

- 1.f** Emission Limitation: 0.15 lb SO₂/mm Btu of actual heat input for each blast furnace stove

Applicable Compliance Methods:

OAC rule 3745-18-04 (A) using Methods 1 through 4 and 6, 6A, 6B, or 6C of 40 CFR Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.

- 1.g** Emission Limitation: 20% opacity, as a 6-minute average for the blast furnace cast house

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR 60, Appendix A and the procedures specified in OAC rule 3745-17-03 (B)(1).

Opacity readings immediately preceding or following one or more interferences shall be deemed to be consecutive. The observation of each cast shall begin with the opening of the tap hole and conclude when the hot metal or slag ceases to flow into the torpedo (iron receiving) cars or slag pit, respectively, whichever occurs later.

During each compliance demonstration cast, the permittee shall operate the blast furnace and cast house in a manner representative of actual operating conditions. Furnace production should be at least as great as the average production rate of the three calendar months immediately preceding the test period, in terms of tons of hot metal per cast.

The permittee shall provide at least 2 visible emission observers. One observer (the "outside observer") shall observe and record the visible emissions that exit the cast house. At least one observer (the "inside observer") shall be situated inside the cast house operations, consistent with the safety of the observer(s). Any outside observers shall be certified in accordance with Method 9.

V. Testing Requirements (continued)

The inside observer(s) shall record, at a minimum, the following:

- i. The number of the start and stop times of cast house operations;
- ii. The qualitative magnitude of emissions from cast house operations (e.g. light, medium, heavy);
- iii. Description of out-of-the-ordinary occurrence (such as torpedo car overfilling) and the quantitative magnitude of emissions caused;
- iv. The qualitative capture efficiency of the trough hood (e.g. excellent, good, fair, poor);
- v. A description of the control techniques employed, including whether torpedo cars have dark spots (cold areas); and
- vi. Operating parameters such as:
 - . (a) drill size;
 - . (b) tons of hot metal cast;
 - . (c) sulfur content of the hot metal;
 - . (d) furnace hot blast pressure;
 - . (e) furnace checking practice;
 - . (f) furnace wind rate.

The outside observer shall make and record opacity readings at 15 second intervals. Readings shall be made of emissions at either the roof monitor or the space between the cast house and blast furnace, whichever is more opaque at any instant.

2. Heat content, gross heating value or gross calorific value of gaseous fuel in Btu/CF (British thermal unit per cubic foot)

The following test method(s) shall be employed:

OAC rule 3745-17-03, Measurement methods and procedures, paragraph (B) (9) (b), the heat content of fuels shall be determined according to "ASTM Standards "D1826" for gaseous fuels where applicable. For gaseous fuels to which "D1826" does not apply, "D900" shall be used.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA. The State may utilize the services of any private laboratory to conduct the testing in accordance with ASTM standards.

3. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons) of raw material charged, the gaseous fuel usage (in cubic feet per hour), the pressure drop (in inches of water column) across each Venturi scrubber, and whether the flare was operating or not.
4. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission 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 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. The permittee shall comply with the requirements of 40 CFR, Part 63, Subpart FFFFF as specified in Attachment A of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 BOF, #1 Vessel (P905)
Activity Description: BOF steelmaking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
290 tons of steel/hour Koppers Co. Basic Oxygen Furnace Vessel #1 with closed hood for controlled carbon monoxide (CO) emission combustion and equipped with 79,000 actual cubic feet per minute (acfm) (at 140 degrees Fahrenheit) primary suppressed combustion (SC) system, a flare, a 700,000 acfm (at 120 degrees Fahrenheit) secondary emission control baghouse, a Lear Siegler Model RM 41 continuous opacity monitor on the baghouse stack, and includes scrap metal and hot metal charging, scrap melting, oxygen blowing, reblowing/refining, turndown, slagging-off and tapping operations	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the suppressed combustion system venturi scrubber stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-12(P)(10)	Combined particulate emissions from the suppressed combustion system venturi scrubber stack shall not exceed 15.0 pounds per hour.
	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Employ reasonable available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. (See sections A.I.2.a and A.I.2.b.)
	40 CFR, Part 52, Section 52.1881(b)(15)(xi)(J)	Sulfur dioxide (SO ₂) emissions shall not exceed a maximum of 0.10 lb/mm Btu of actual heat input from each stack.

2. Additional Terms and Conditions

- 2.a Hot metal charging of the vessel shall be done with the vessel tilted no more than 40 degrees from the vertical position. Hot metal charging shall be conducted with full draft on the primary SC exhaust system.

2. Additional Terms and Conditions (continued)

- 2.b** In addition to the measures in A.I.2.a. above, RACM shall be the use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust emissions from scrap metal and hot metal charging, bleeders, cast house, and flue dust storage and handling. Such equipment shall meet the following requirements:
- i. the collection efficiency 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; and
 - ii. the control equipment achieves an outlet emission rate of not greater than 0.030 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. Operational restrictions for the venturi scrubber serving this emissions unit:
 - (a) The pressure drop across the venturi scrubber shall be continuously maintained, at all times while the emissions unit is in operation, in the range of pressure drops recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in inches of water column.
 - (b) The scrubber water flow rate shall be continuously maintained, at all times while the emissions unit is in operation, at a value of not less than that the scrubber water flow rates recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in gallons per minute per 1000 cubic feet of exhaust gas.
 - (c) The exhaust gas flow rate, in terms of draft fan amperage, shall be continuously maintained, at all times while the emissions unit is in operation, at a value of not less than that recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in amps.
2. The pressure drop across the baghouse shall be maintained within the range of 3 to 7 inches of water column while the emissions unit is in operation.
3. A pilot flame shall be maintained at all times in the flare's pilot light burner or the arcing of the flare's electric arc ignition system shall pulse continually.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform visible particulate emission readings of the fugitive dust emissions from the roof monitor serving emissions units P905 and P906 and shall maintain records of the readings. The visible particulate emission readings shall be performed by certified readers in accordance with procedures contained in OAC rule 3745-17-03(B)(3). The observations shall include a minimum of four consecutive heats per week, balanced between emissions units P905 and P906 over each calendar quarter, and shall be recorded on forms that have been approved by the Director. Therefore, for each calendar quarter, an approximately equal number of observations shall be performed for each of emissions units P905 and P906. Observations shall commence when charging is initiated and shall end at the conclusion of the slagging operation.

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

2. Monitoring and record keeping requirements for the venturi scrubber serving this emissions unit:

The permittee shall properly install, operate and maintain equipment to continuously monitor the pressure drop across the scrubber, the scrubber water flow rate, and the exhaust gas flow rate (in terms of fan motor amperage) 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 maintain daily records of the following information:

- (a) The pressure drop across the scrubber, in inches of water column, measured on an hourly basis.
- (b) The scrubber water flow rate, in gallons per minute, measured on an hourly basis.
- (c) The exhaust gas flow rate, in terms of draft fan amperage (in amps), measured on an hourly basis.
- (d) The operating times for the control device, monitoring equipment, and the associated emissions unit.

3. The permittee shall maintain daily records of the heat log.

4. The permittee shall monitor the performance of the secondary emission control system baghouse by continuously recording visible particulate emissions from the baghouse stack using a continuous opacity monitor, which shall be calibrated, maintained and operated in accordance with the procedures set forth in 40 CFR, Part 60, Appendix B.

5. 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 at the beginning of each shift on a daily basis.

6. Continuous Opacity Monitoring - Certified Systems
Statement of Certification

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

Each continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data recording/processing hardware and software.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

8. Quality Assurance/Quality Control

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system, which is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system shall be kept on site and available for inspection during regular office hours.

9. The permittee shall properly install, operate, and maintain a device to continuously monitor the [XXXX1] 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 [XXXX2].
- (b) The operating times for the flare, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. Copies of the visible PE readings for the BOF shop roof monitors shall be submitted on a quarterly basis. The submissions shall occur by January 31, April 30, July 31, and October 31 of each year and shall include the readings performed during the previous calendar quarter.

2. Reporting requirements for the venturi scrubber serving this emissions unit:

The permittee shall submit deviation (excursion) reports that identify any measured scrubber parameter that exceeds the limitations specified above. These reports shall include the following information:

- (a) the date of the exceedance;
- (b) the time interval over which the exceedance occurred;
- (c) the value of the exceedance;
- (d) the cause(s) of the exceedance;
- (e) the corrective action which has been taken or will be taken to prevent exceedances in the future; and
- (f) a copy of any chart which shows the exceedance.

3. Pursuant to 40 CFR, Parts 60.7(C) and 60.13 (h), this facility shall submit reports on a quarterly basis to the appropriate Ohio EPA District Office or local air agency documenting all instances of visible PE from the baghouse stack in excess of the limitations as specified in OAC Rule 3745-17-07(A)(1). These quarterly excess emission reports, containing copies of the data recorded and prepared in accordance with 40 CFR 60.7(C), shall be submitted not later than February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.

4. Reporting of Vessel Eruptions: LTV Steel shall submit a monthly report summarizing occurrences of vessel eruptions. Such report shall contain the dates and times of the occurrences, qualitative description (i.e., light, moderate, heavy), whether the eruption was documented by outside observations, and the cause(s) of each vessel eruption.

5. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

6. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

7. The permittee shall submit deviation (excursion) reports that identify all periods during which the [XXXX1] was not functioning properly. The reports shall include the date, time, and duration of each such 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 Visible PE Limitation:
20% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible PE evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- 1.b PE Limitation:
15.0 lbs of PE/hr

Applicable Compliance Method:

Compliance shall be based upon using emissions factors derived from material balance calculations for this emissions unit or using results from the most recent stack test. If required, compliance shall be demonstrated by testing in accordance with OAC rule 3745-17-03(B)(10).

- 1.c Visible Fugitive PE Limitation:
20% opacity, as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the methods and procedures specified in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

2. Particulate Emission Testing:

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 and approximately 2.5 years after permit issuance.
- b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limitations of 15.0 pounds of particulate emissions per hour for the primary emission control system and 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases for the secondary emission control system.
- c. The following test method shall be employed to demonstrate compliance with the particulate emission limitations:

Method 5 of 40 CFR, Part 60, Appendix A.
- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 30 days prior to the proposed test dates, the permittee shall submit "Intent to Test" notifications to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notifications shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates 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 appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.
- f. 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 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.
- g. A comprehensive written report on the results of each emissions test shall be signed by the person or persons responsible for each test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test.

VI. Miscellaneous Requirements

1. The permittee shall comply with the requirements of 40 CFR, Part 63, Subpart FFFFF as specified in Attachment A of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
290 tons of steel/hour Koppers Co. Basic Oxygen Furnace Vessel #1 with closed hood for controlled CO emission combustion and equipped with primary 79,000 acfm (140 deg. F) Suppressed Combustion (SC) system, a flare a secondary emissions 700,000 acfm (120 deg. F) baghouse, a Lear Siegler Model RM 41 continuous opacity monitor and includes scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 BOF, #2 Vessel (P906)
Activity Description: BOF steelmaking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
290 tons steel/hour Koppers Co. Basic Oxygen Furnace Vessel #2 with closed hood for controlled CO combustion and equipped with primary 79,000 acfm (140 deg. F) Suppressed Combustion (SC) system, a flare a secondary emissions 700,000 acfm (120 deg. F) baghouse, a Lear Siegler Model RM 41 continuous opacity monitor and includes scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the suppressed combustion system venturi scrubber stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-12(P)(10)	Particulate emissions from the suppressed combustion system shall not exceed 15.0 pounds per hour.
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	Employ reasonable available control measures (RACM) that are sufficient to minimize or eliminate visible PE of fugitive dust. (See section A.I.2.b.)
	40 CFR, Part 52, Section 52.1881(b)(15)(xi)(J)	Sulfur dioxide (SO ₂) emissions shall not exceed a maximum of 0.10 lb/mm Btu of actual heat input from each stack.

2. Additional Terms and Conditions

- 2.a Hot metal charging of the vessel shall be done with the vessel tilted no more than 40 degrees from the vertical position. Hot metal charging shall be conducted with full draft on the primary SC exhaust system.

2. Additional Terms and Conditions (continued)

- 2.b** In addition to the measures in A.I.2.a. above, RACM shall be the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust emissions from scrap metal and hot metal charging, bleeders, cast house, and flue dust storage and handling. Each monthly report shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the end of each month.. Such equipment shall meet the following requirements:
- i. the collection efficiency 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; and
 - ii. the control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s), which ever is less stringent.

II. Operational Restrictions

1. Operational restrictions for the venturi scrubber serving this emissions unit:
 - (a) The pressure drop across the venturi scrubber shall be continuously maintained, at all times while the emissions unit is in operation, in the range of pressure drops recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in inches of water column.
 - (b) The scrubber water flow rate shall be continuously maintained, at all times while the emissions unit is in operation, at a value of not less than that the scrubber water flow rates recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in gallons per minute per 1000 cubic feet of exhaust gas.
 - (c) The exhaust gas flow rate in terms of draft fan amperage shall be continuously maintained, at all times while the emissions unit is in operation, at a value of not less than that recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in amps.
2. The pressure drop across the baghouse shall be maintained within the range of 3 to 7 inches of water column while the emissions unit is in operation.
3. A pilot flame shall be maintained at all times in the flare's pilot light burner or the arcing of the flare's electric arc ignition system shall pulse continually.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform visible PE readings of the fugitive emissions from the roof monitor serving emissions units P905 and P906 and shall maintain records of the readings. The visible PE readings shall be performed by certified readers in accordance with procedures contained in OAC rule 3745-17-03(B)(3). The observations shall include a minimum of four consecutive heats per week, balanced between emissions units P905 and P906 over each calendar quarter, and shall be recorded on forms that have been approved by the Director. Therefore, for each calendar quarter, an approximately equal number of observations shall be performed for each of emissions units P905 and P906. Observations shall commence when charging is initiated and shall end at the conclusion of the slagging operation.

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

2. Monitoring and record keeping requirements for the venturi scrubber serving this emissions unit:

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 exhaust gas flow rate (in terms of fan motor amperage) 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 maintain daily records of the following information:

- (a) The pressure drop across the scrubber, in inches of water, measured on an hourly basis.
- (b) The scrubber water flow rate, in gallons per minute, measured on an hourly basis.
- (c) The exhaust gas flow rate, in terms of draft fan amperage, measured on an hourly basis.
- (d) The operating times for the control device, monitoring equipment, and the associated emissions unit.

3. The permittee shall maintain daily records of the heat log.

4. Monitor the performance of the secondary emission control system baghouse by continuously recording visible PE from the baghouse stack using a continuous opacity monitor, which shall be calibrated, maintained and operated in accordance with the procedures set forth in 40 CFR, Part 60, Appendix B.

5. 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 at the beginning of each shift on a daily basis.

6. Continuous Opacity Monitoring - Certified Systems
Statement of Certification

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

Each continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data recording/processing hardware and software.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

8. Quality Assurance/QualityControl

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system shall be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. Copies of the visible PE readings for the BOF shop roof monitors shall be submitted on a quarterly basis. The submissions shall occur by January 31, April 30, July 31, and October 31 of each year and shall include the readings performed during the previous calendar quarter.

2. Reporting requirements for the venturi scrubber serving this emissions unit:

The permittee shall submit deviation (excursion) reports that identify any measured scrubber parameter that exceeds the limitations specified above. These reports shall include the following information:

- (a) the date of the exceedance;
- (b) the time interval over which the exceedance occurred;
- (c) the value of the exceedance;
- (d) the cause(s) of the exceedance;
- (e) the corrective action which has been taken or will be taken to prevent exceedances in the future; and
- (f) a copy of any chart which shows the exceedance.

3. Pursuant to 40 CFR, Parts 60.7(C) and 60.13 (h), this facility shall submit reports on a quarterly basis to the appropriate Ohio EPA District Office or local air agency documenting all instances of visible PE from the baghouse stack in excess of the limitations as specified in OAC Rule 3745-17-07(A)(1). These quarterly excess emission reports, containing copies of the data recorded and prepared in accordance with 40 CFR 60.7(C), shall be submitted not later than February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.

4. Reporting of Vessel Eruptions: LTV Steel shall submit a monthly report summarizing occurrences of vessel eruptions. Such report shall contain the dates and times of the occurrences, qualitative description (i.e., light, moderate, heavy), whether the eruption was documented by outside observations, and the cause(s) of each vessel eruption.

5. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

6. Pursuant to 40 CFR, Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A)(1), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

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

- 1.a Visible PE Limitation:
20% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible PE evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- 1.b PE Limitation:
15.0 lbs/hr

Applicable Compliance Method:

Compliance shall be based upon using emissions factors derived from material balance calculations for this emissions unit or using results from the most recent stack test. If required, compliance shall be demonstrated by testing in accordance with OAC rule 3745-17-03(B)(10).

- 1.c Visible Fugitive PE Limitation:
20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the methods and procedures specified in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

2. Particulate Emission Testing:

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 and approximately 2.5 years after permit issuance.
- b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limitations of 15.0 pounds of particulate emissions per hour for the primary emission control system and 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases for the secondary emission control system.
- c. The following test method shall be employed to demonstrate compliance with the particulate emission limitations:

Method 5 of 40 CFR, Part 60, Appendix A.
- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 30 days prior to the proposed test dates, the permittee shall submit "Intent to Test" notifications to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notifications shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates 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 appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.
- f. 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 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.
- g. A comprehensive written report on the results of each emissions test shall be signed by the person or persons responsible for each test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test.

VI. Miscellaneous Requirements

1. The permittee shall comply with the requirements of 40 CFR, Part 63, Subpart FFFFF as specified in Attachment A of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
290 tons steel/hour Koppers Co. Basic Oxygen Furnace Vessel #1 with closed hood for controlled CO combustion and equipped with primary 79,000 acfm (140 deg. F) Suppressed Combustion (SC) system, a flare a secondary emissions 700,000 acfm (120 deg. F) baghouse, a Lear Siegler Model RM 41 continuous opacity monitor and includes scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations.	None	None

2. Additional Terms 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: Blast Furnace C1 (P923)
Activity Description: Blast furnace ironmaking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast Furnace C-1 Iron Making, which consists of blast furnace charging, iron ore reduction, stoves, cast house operation, built-in Venturi scrubber, bleeders, flue dust storage and flue dust handling with a Passive Emission Control (PEC) System and a ground flare	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) of fugitive dust shall not exceed 20% opacity, as a 3-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(3)	Visible PE of fugitive dust from the blast furnace cast houses shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(A)(1)	For any stack, 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)(3)	See section A.1.2.a. below.
Blast Furnace C-1 Stoves	OAC rule 3745-17-12(O)(4)	PE shall not exceed 11.2 lbs/hr.
	40 CFR, Part 52, Section 52.1881(b)(15)(xi)(A)	Sulfur dioxide (SO ₂) emissions shall not exceed 0.024 lb/mm Btu of actual heat input from each blast furnace stove.

2. Additional Terms and Conditions

- 2.a The use of reasonably available control measures, consisting of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and/or control the fugitive dust emissions from furnace charging and tapping (cast houses), bleeders, and flue dust storage and handling. These measures shall minimize or eliminate visible particulate emissions of fugitive dust.

II. Operational Restrictions

1. The PEC System shall be used to control PE generated by cast house operation. All the requirements and operating and maintenance procedures outlined in paragraphs 1 and 2 in Appendix A of the confidential PEC system document shall be strictly adhered to during each cast in order to minimize or eliminate visible PE of fugitive dust.

II. Operational Restrictions (continued)

2. The permittee shall use a flare to control carbon monoxide (CO) emissions while the emissions unit is in operation. The flare shall be equipped with (exhaust) gas monitoring and recording equipment and a flame presence sensor to assure that, when operational, the system is operating at design levels to assure maximum reduction of CO emissions.

The flame presence sensor and the exhaust gas monitoring and recording equipment shall be operational while the flare is in operation.

3. Operational restrictions for the venturi scrubber serving this emissions unit:
 - (a) The pressure drop across the venturi scrubber shall be continuously maintained, at all times while the emissions unit is in operation, in the range of pressure drops recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in inches of water column.
 - (b) The scrubber water flow rate shall be continuously maintained, at all times while the emissions unit is in operation, at a value of not less than that the scrubber water flow rates recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in gallons per minute per 1000 cubic feet of exhaust gas.
 - (c) The exhaust gas flow rate, in terms of draft fan amperage, shall be continuously maintained, at all times while the emissions unit is in operation, at a value of not less than that recorded during the last performance test that demonstrated compliance with the applicable emission limitations, in amps.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall install, calibrate, operate, and maintain, in good working condition, system(s) to monitor the pressure drop across the scrubber, in inches of water column, the scrubber water flow rate, in gallons per minute, and the exhaust gas flow rate in terms of fan amperage, in amps, in accordance with the manufacturers' recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee. The monitoring device(s) shall be capable of accurately measuring the desired parameter(s) whenever this emissions unit is in operation.

The permittee shall install, calibrate, operate, and maintain, in good working condition, system(s) to record the pressure drop across the scrubber, in inches of water column, the scrubber water flow rate, in gallons per minute, and the exhaust gas flow rate in terms of fan amperage, in amps, in accordance with the manufacturers' recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee. The recording device(s) shall be capable of accurately recording the desired parameter(s) whenever this emissions unit is in operation.

Units for gas volume flow rate is in cubic feet per minute. Units for exhaust gas volume flow rate is in cubic feet per minute. The flare flame presence shall be either yes or no. Units for the amount of gaseous fuel used in fuel burning equipment shall be in cubic feet per hour. Units for analyses of gaseous fuel used in fuel burning equipment shall be in percent by weight.

2. The permittee shall collect and record on a daily basis the following parameters whenever this emissions unit is in operation:
 - a. The dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as an iron car overflow, a slag pit eruption or bleeder opening during upset or slip, etc.;
 - b. The dates and identification numbers of casts during which a trough hood and/or iron or slag runner cover was not available or used;
 - c. The flare exhaust gas flow monitoring and recording equipment shall identify the following:
 - i. the time of day;
 - ii. the exhaust gas flow rate; and
 - iii. the start and stop time of each tapping operation and of each use of the flare.

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

3. The permittee shall collect and record on a monthly basis the following parameters whenever this emissions unit is in operation:

Readings of visible PE from the cast houses, during daylight hours, of at least one cast, shall be made by certified visible PE readers. The visible PE readers shall be certified in accordance with Reference Method 9 of 40 CFR, Part 60, Appendix A.

4. The permittee shall collect and record on a calendar quarterly basis the following parameters whenever this emissions unit is in operation:
 - a. the total number of casts; and
 - d. the type of fuel used, the amount of the fuel used, and the sampling and the analyses of fuel used in the fuel burning equipment in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly written reports that identify all deviations (excursions), exceedance(s) and non-compliance time periods of the following:
 - a. the dates and identification numbers of casts and descriptions of any significant emission generating incident(s) such as an iron car overflow, a slag pit eruption, or bleeder opening during upset or slip, etc.;
 - b. the dates and identification numbers of casts during which a trough hood and/or iron or slag runner cover was not available or used;
 - c. the total number of casts during a calendar quarter;
 - d. the type of fuel used, the amount of the fuel used, and the sampling and the analyses of fuel used in fuel burning equipment in this emissions unit in a calendar quarter;
 - e. all periods of time when the flare was not functioning while the emissions unit was in operation;
 - f. monthly visible PE readings for the casting operations; and
 - g. all excursions from the scrubber parameter operating restrictions.

V. Testing Requirements

1. Compliance with the PE limitation of 11.2 lbs/hr for each stove stack and the SO₂ emission limitation of 0.024 lb/mm Btu of actual heat input for each stove stack shall be determined by testing in accordance with the following:
 - a. The testing shall be conducted using the following test methods:

Methods 1 through 5 of 40 CFR, Part 60, Appendix A, for PE; and
Methods 1 through 4 and 6, 6A, 6B, or 6C of 40 CFR, Part 60, Appendix A, for SO₂.
 - b. The emission testing shall be conducted within 6 months after issuance of the permit.
 - c. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

V. Testing Requirements (continued)

- e. 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 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.
- f. A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.
- g. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in tons) of raw material charged, the gaseous fuel usage (in cubic feet per hour), and whether the flare was operating or not.
- h. The permittee shall provide at least one visible PE reader for conducting VE readings during the above-mentioned testing. Any visible PE reader shall be certified in accordance with U.S. EPA Reference Method 9 of 40 CFR, Part 60, Appendix A.

- 2. Compliance with the emission limitations in section A.I.1 shall be determined using the methods specified in the following:
 - 2.a Visible Fugitive PE Limitation: 20% opacity, as a 3-minute average, from any fugitive dust emission, except fugitive dust emissions from the cast houses, and including but not limited to emissions from flue dust storage and flue dust handling.

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

- 2.b Visible Fugitive PE Limitation: 20% opacity, as a 6-minute average, from the blast furnace cast houses

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(1). The visible PE reader shall make and record opacity readings at 15 second intervals.

The observation of each cast shall begin with the opening of the tap hole and conclude when the hot metal or slag ceases to flow into the torpedo (iron receiving) cars or slag pit, respectively, whichever occurs later.

Readings shall be made of emissions at either the roof monitor or another point in the building, whichever is more opaque at any instant.

- 2.c Visible PE Limitation for Stacks: 20% opacity, as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible PE observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

- 2.d PE Limitation: 11.2 lbs of PE/hr from blast furnace stoves

Applicable Compliance Methods:

OAC rule 3745-17-03(B)(10) using U.S. EPA Methods 1 through 5 of 40 CFR, Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from Ohio EPA.

- 2.e SO₂ Emission Limitation: 0.024 lb of SO₂/mm Btu of actual heat input from each blast furnace stove

Applicable Compliance Methods:

OAC rule 3745-18-04(A) using U.S. EPA Methods 1 through 4 and 6, 6A, 6B, or 6C of 40 CFR, Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from Ohio EPA.

VI. Miscellaneous Requirements

1. The permittee shall comply with the requirements of 40 CFR, Part 63, Subpart FFFFF as specified in Attachment A of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast Furnace C-1 Iron Making, which consists of blast furnace charging, iron ore reduction, stoves, cast house operation, built-in Venturi scrubber, bleeders, flue dust storage and flue dust handling with a Passive Emission Control (PEC) System and a ground flare	OAC rule 3745-18-24(B)(4)	SO2 emissions shall not exceed 0.15 lb/mm Btu of actual heat input, from each stove.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

- SO2 Emission Limitation: 0.15 lb of SO2/mm Btu of actual heat input, from each stove

Applicable Compliance Methods:

OAC rule 3745-18-04(A) using U.S. EPA Methods 1 through 4 and 6, 6A, 6B, or 6C of 40 CFR, Part 60, Appendix A. If applicable, alternative U.S. EPA test methods may be used with prior approval from Ohio EPA.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 BOF, No. 94 (P925)
Activity Description: BOF steelmaking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
170 tons of steel/hour Koppers Co. Basic Oxygen Furnace Vessel #94 with open hood combustion for reduction of carbon monoxide (CO) emissions and equipped with a 564,000 actual cubic feet per minute (acfm) (at 265 degrees Fahrenheit) electrostatic precipitator (ESP) and a Phoenix Model OAPC 20/20 continuous opacity monitoring system on each of the two ESP stacks and includes scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the ESP stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-12(O)(10)	Combined particulate emissions from the two ESP stacks serving emissions units P925 and P926 shall not exceed 39.8 pounds per hour.
	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Employ reasonable available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. (See T&C A.I.2.)

2. Additional Terms and Conditions

- 2.a Hot metal charging of the vessel shall be done with the vessel tilted no more than 40 degrees from the vertical position. Hot metal charging shall be conducted with full draft on the exhaust system.
- 2.b In addition to the control measures in A.I.2.a, RACM shall be the use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust emissions from scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing, turndown, slagging-off and tapping operations. Such equipment shall meet the following requirements:
 - i. the collection efficiency 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; and
 - ii. the control equipment achieves an outlet emission rate of not greater than 0.030 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 operate the ESP at all times while this emissions unit is operation.
2. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform visible particulate emission readings of the fugitive dust emissions from the roof monitor serving emissions units P925 and P926 and shall maintain records of the readings. The visible particulate emission readings shall be performed by certified readers in accordance with procedures contained in OAC rule 3745-17-03(B)(3). The observations shall include a minimum of four consecutive heats per week, balanced between emissions units P925 and P926 over each calendar quarter, and shall be recorded on forms that have been approved by the Director. Therefore, for each calendar quarter, an approximately equal number of observations shall be performed for each of emissions units P925 and P926. Observations shall commence when charging is initiated and shall end at the conclusion of the slagging operation.

2. The permittee shall maintain daily records of the heat log.

3. Continuous Opacity Monitoring - Certified Systems
Statement of Certification

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

4. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

Each continuous opacity monitoring system shall consist of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data recording/processing hardware and software.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

5. Quality Assurance/Quality Control

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system, which is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system shall be kept on site and available for inspection during regular office hours.

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

6. The permittee shall properly operate and maintain equipment to continuously monitor the secondary voltage, in kilovolts, and the secondary current, in amps, in all fields of the ESP while the emissions unit is in operation. The secondary voltage and secondary current monitors shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:

- a. the secondary voltage, in kilovolts (kV), and the secondary current, in amps, for each transformer rectifier (TR) set in the ESP;
 - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kV) by the secondary current (in amps) for each TR set); and
 - c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).
7. The permittee shall record the following information for each day:
- a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90% of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation; and
 - b. the duration of the downtime for the monitoring equipment specified in Section A.III.7. above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. Copies of the visible particulate emission readings for the BOF shop roof monitor shall be submitted on a quarterly basis. The submissions shall occur by January 31, April 30, July 31, and October 31 of each year and shall include the readings performed during the previous calendar quarter.
2. Pursuant to 40 CFR, Parts 60.7(C) and 60.13 (h), the permittee shall submit reports on a quarterly basis to the appropriate Ohio EPA District Office or local air agency documenting all instances of visible particulate emissions from the ESP stack in excess of the limitations specified in OAC rule 3745-17-07(A). These quarterly excess emission reports, containing copies of the data recorded and prepared in accordance with 40 CFR 60.7(C), shall be submitted not later than February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.
3. The permittee shall submit a monthly report summarizing occurrences of vessel eruptions. Such report shall contain the dates and times of the occurrences, qualitative description (i.e., light, moderate, heavy eruption), whether the eruption was documented by outside observations, and the cause(s) of each vessel eruption. Each monthly report shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the end of each month.

IV. Reporting Requirements (continued)

4. Pursuant to 40 CFR, Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A)(1), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in section A.II.2. of this permit.
6. The permittee shall submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.

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 Visible Particulate Emission Limitation for Stacks:
20% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible particulate emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9 of 40 CFR, Part 60, Appendix A.

- 1.b Particulate Emission Limitation:
39.8 lbs/hr

Applicable Compliance Method:

Compliance shall be based upon using emissions factors derived from material balance calculations for this emissions unit or using results from the most recent stack test. If required, compliance shall be demonstrated by testing in accordance with OAC rule 3745-17-03(B)(10).

- 1.c Visible Fugitive Particulate Emission Limitation:
20% opacity, as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible particulate emission observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the methods and procedures specified in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

2. Particulate Emission Testing:

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 and approximately 2.5 years after permit issuance.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate emission rate of 39.8 pounds of particulate emissions per hour.
- c. The following test method shall be employed to demonstrate compliance with the allowable particulate emission rate:

Method 5 of 40 CFR, Part 60, Appendix A.

- d. The secondary voltage and secondary current values of the ESP during the test shall fall within the acceptable operating ranges established in the manufacturer's specifications for the ESP serving this emissions unit.
- e. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- f. Not later than 30 days prior to the proposed test dates, the permittee shall submit "Intent to Test" notifications to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notifications shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates 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 appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.
- g. 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 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.
- h. A comprehensive written report on the results of each emissions test shall be signed by the person or persons responsible for each test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test.

VI. Miscellaneous Requirements

1. The permittee shall comply with the requirements of 40 CFR, Part 63, Subpart FFFFF as specified in Attachment A of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
170 tons of steel/hour Koppers Co. basic oxygen furnace vessel #94 with open hood combustion for reduction of carbon monoxide (CO) emissions and equipped with a 564,000 actual cubic feet per minute (acfm) (at 265 degrees Fahrenheit) electrostatic precipitator (ESP) and a Phoenix Model OAPC 20/20 continuous opacity monitoring system on each of the two ESP stacks, and includes scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 BOF, No. 95 (P926)
Activity Description: BOF steelmaking

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
170 tons of steel/hour Koppers Co. Basic Oxygen Furnace Vessel #94 with open hood combustion for reduction of carbon monoxide (CO) emissions and equipped with a 564,000 actual cubic feet per minute (acfm) (at 265 degrees Fahrenheit) electrostatic precipitator (ESP) and a Phoenix Model OAPC 20/20 continuous opacity monitoring system on each of the two ESP stacks, and includes scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the ESP stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-12(O)(10)	Combined particulate emissions from the two ESP stacks serving emissions units P925 and P926 shall not exceed 39.8 pounds per hour.
	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	Employ reasonable available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. (See T&C A.I.2.)

2. Additional Terms and Conditions

- 2.a Hot metal charging of the vessel shall be done with the vessel tilted no more than 40 degrees from the vertical position. Hot metal charging shall be conducted with full draft on the exhaust system.
- 2.b In addition to the control measures in A.I.2.a, RACM shall be the use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent to the ESP the fugitive dust emissions from scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations. Such equipment shall meet the following requirements:
 - i. the collection efficiency 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; and
 - ii. the control equipment achieves an outlet emission rate of not greater than 0.030 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 operate the ESP at all times while this emissions unit is operation.
2. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform visible particulate emission readings of the fugitive dust emissions from the roof monitor serving emissions units P925 and P926 and shall maintain records of the readings. The visible particulate emission readings shall be performed by certified readers in accordance with procedures contained in OAC rule 3745-17-03(B)(3). The observations shall include a minimum of four consecutive heats per week, balanced between emissions units P925 and P926 over each calendar quarter, and shall be recorded on forms that have been approved by the Director. Therefore, for each calendar quarter, an approximately equal number of observations shall be performed for each of emissions units P925 and P926. Observations shall commence when charging is initiated and shall end at the conclusion of the slagging operation.

2. The permittee shall maintain daily records of the heat log.

3. Continuous Opacity Monitoring - Certified Systems
Statement of Certification

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

4. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

Each continuous opacity monitoring system shall consist of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data recording/processing hardware and software.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

5. Quality Assurance/Quality Control

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system, which is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system shall be kept on site and available for inspection during regular office hours.

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

6. The permittee shall properly operate and maintain equipment to continuously monitor the secondary voltage, in kilovolts, and the secondary current, in amps, in all fields of the ESP while the emissions unit is in operation. The secondary voltage and secondary current monitors shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:

- a. the secondary voltage, in kilovolts (kV), and the secondary current, in amps, for each transformer rectifier (TR) set in the ESP;
 - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kV) by the secondary current (in amps) for each TR set); and
 - c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).
7. The permittee shall record the following information for each day:
- a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90% of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation; and
 - b. the duration of the downtime for the monitoring equipment specified in Section A.III.7. above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. Copies of the visible particulate emission readings for the BOF shop roof monitor shall be submitted on a quarterly basis. The submissions shall occur by January 31, April 30, July 31, and October 31 of each year and shall include the readings performed during the previous calendar quarter.
2. Pursuant to 40 CFR, Parts 60.7(C) and 60.13 (h), the permittee shall submit reports on a quarterly basis to the appropriate Ohio EPA District Office or local air agency documenting all instances of visible particulate emissions from the ESP stack in excess of the limitations specified in OAC rule 3745-17-07(A). These quarterly excess emission reports, containing copies of the data recorded and prepared in accordance with 40 CFR 60.7(C), shall be submitted not later than February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.
3. The permittee shall submit a monthly report summarizing occurrences of vessel eruptions. Such report shall contain the dates and times of the occurrences, qualitative description (i.e., light, moderate, heavy eruption), whether the eruption was documented by outside observations, and the cause(s) of each vessel eruption. Each monthly report shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the end of each month.

IV. Reporting Requirements (continued)

4. Pursuant to 40 CFR, Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A)(1), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall include a statement to that effect. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in section A.II.2. of this permit.
6. The permittee shall submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.

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 Visible Particulate Emission Limitation for Stacks:
20% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible particulate emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9 of 40 CFR, Part 60, Appendix A.

- 1.b Particulate Emission Limitation:
39.8 lbs of particulate emissions/hr

Applicable Compliance Method:

Compliance shall be determined based upon using emissions factors derived from material balance calculations for this emissions unit or using results from the most recent stack test. If required, compliance shall be demonstrated by testing in accordance with OAC rule 3745-17-03(B)(10).

- 1.c Visible Fugitive Particulate Emission Limitation:
20% opacity, as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible fugitive particulate emission observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the methods and procedures specified in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

2. Particulate Emission Testing:

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 and approximately 2.5 years after permit issuance.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate emission rate of 39.8 pounds of particulate emissions per hour.
- c. The following test method shall be employed to demonstrate compliance with the allowable particulate emission rate:

Method 5 of 40 CFR, Part 60, Appendix A.

- d. The secondary voltage and secondary current values of the ESP during the test shall fall within the acceptable operating ranges established in the manufacturer's specifications for the ESP serving this emissions unit.
- e. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- f. Not later than 30 days prior to the proposed test dates, the permittee shall submit "Intent to Test" notifications to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notifications shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates 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 appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.
- g. 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 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.
- h. A comprehensive written report on the results of each emissions test shall be signed by the person or persons responsible for each test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test.

VI. Miscellaneous Requirements

1. The permittee shall comply with the requirements of 40 CFR, Part 63, Subpart FFFFF as specified in Attachment A of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
170 tons of steel/hour Koppers Co. basic oxygen furnace vessel #94 with open hood combustion for reduction of carbon monoxide (CO) emissions and equipped with a 564,000 actual cubic feet per minute (acfm) (at 265 degrees Fahrenheit) electrostatic precipitator (ESP) and a Phoenix Model OAPC 20/20 continuous opacity monitoring system on each of the two ESP stacks, and includes scrap metal and hot metal charging, scrap melting, oxygen blowing and reblowing/refining, turndown, slagging-off and tapping operations	None	None

2. Additional Terms 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: 84" Tandem Mill (Z007)
Activity Description: Tandem mill

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
84" Tandem Mill	OAC rule 3745-21-07(G)(2)	Exempt, see section A.II.1.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), shall not be used in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep monthly records of the following information:
 - a. the type(s) of lubrication(s) being used;
 - b. whether each lubricant is or is not a photochemically reactive material;
 - b. the amount of lubrication being added to this emissions unit, in pounds; and
 - c. the number of hours of operation of this emissions unit.

The permittee shall keep records for a period of five years.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which any photochemically reactive material was being used in this emissions unit. This written report shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days of the occurrence of the deviation.

V. Testing Requirements

1. Compliance with the above operating restriction shall be based on the record keeping requirements in section 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
84" Tandem Mill	None	None

2. Additional Terms 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: 84" Hot Strip Mill - E (Z009)
Activity Description: Hot Strip Rolling Mill

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
84" Hot Strip Rolling Mill	OAC rule 3745-21-07(G)(2)	Exempt, see section A.II.1.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), shall not be used in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep monthly records of the following information:
 - a. the type(s) of lubrication(s) being used;
 - b. whether each lubricant is or is not a photochemically reactive material;
 - c. the amount of lubrication being added to maintain a lubrication level of 576 lbs/hr, in pounds; and
 - d. the number of hours of operation of this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which any photochemically reactive material was being used in this emissions unit. Each written report shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days of the occurrence of the deviation.

V. Testing Requirements

1. Compliance with the above operating restriction shall be based on the record keeping requirements in section 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
84" Hot Strip Rolling Mill	None	None

2. Additional Terms 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: DHCC Hot Strip Mill - W (Z010)
Activity Description: Hot Strip Rolling Mill

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
DHCC Hot Strip Rolling Mill	OAC rule 3745-21-07(G)(2)	Exempt, see section A.II.1.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), shall not be used in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep monthly records of the following information:
 - a. the type(s) of lubrication(s) being used;
 - b. whether each lubricant is or is not a photochemically reactive material;
 - c. the amount of lubrication being added to maintain a lubrication level of 336 lbs/hr, in pounds; and
 - d. the number of hours of operation of this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which any photochemically reactive material was being used in this emissions unit. Each written report shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days of the occurrence of the deviation.

V. Testing Requirements

1. Compliance with the above operating restriction shall be based on the record keeping requirements in section 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
DHCC Hot Strip Rolling Mill	None	None

2. Additional Terms 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

THIS IS THE LAST PAGE OF THE PERMIT

Attachment A

ISG Cleveland Inc

Ohio EPA Premise Number: 1318001613

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 (E_p) 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 (knead 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 with 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 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, 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, superseded) 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 triboelectric, 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.